



MICHAEL S. REGAN

MICHAEL A. ABRACZINSKAS

XXX xxx, 2017

Ms. Jane Rosaasen Logistics Director Daimler Trucks North America LLC 1800 North Main Street Mount Holly, North Carolina 28120

Dear Ms. Rosaasen:

SUBJECT: Air Quality Permit No. 03926T45

Facility ID: 3600153

Daimler Trucks North America LLC

Mount Holly Gaston County Fee Class: Title V PSD Class: Major

In accordance with your completed Air Quality Permit Application for a PSD/PAL Modification of a Title V permit per 15A NCAC 2Q .0501(d)(1), received XXX xxx, 2017, we are forwarding herewith Air Quality Permit No. 03926T45 to Daimler Trucks North America LLC, Freightliner – Mount Holly Truck Manufacturing Plant, 1800 North Main Street, Mount Holly, North Carolina authorizing the construction and operation, of the emission source(s) and associated air pollution control device(s) specified herein. Additionally, any emissions activities determined from your Air Quality Permit Application as being insignificant per 15A North Carolina Administrative Code 2Q .0503(8) have been listed for informational purposes as an "ATTACHMENT." Please note the requirements for the annual compliance certification are contained in General Condition P in Section 3. The current owner is responsible for submitting a compliance certification for the entire year regardless of who owned the facility during the year.

As the designated responsible official it is your responsibility to review, understand, and abide by all of the terms and conditions of the attached permit. It is also your responsibility to ensure that any person who operates any emission source and associated air pollution control device subject to any term or condition of the attached permit reviews, understands, and abides by the condition(s) of the attached permit that are applicable to that particular emission source.

If any parts, requirements, or limitations contained in this Air Quality Permit are unacceptable to you, you have the right to request a formal adjudicatory hearing within 30 days following receipt of this permit, identifying the specific issues to be contested. This hearing request must be in the form of a written petition, conforming to NCGS (North Carolina General Statutes) 150B-23, and filed with both the Office of Administrative Hearings, 6714 Mail Service Center, Raleigh, North Carolina 27699-6714 and the Division of Air Quality, Permitting Section, 1641 Mail Service Center, Raleigh, North Carolina 27699-1641. The form for requesting a formal adjudicatory hearing may be obtained upon request from the Office of Administrative Hearings. Please note that this permit will be stayed in its entirety upon receipt of the request for a hearing unless a request for a hearing is made pursuant to NCGS 150B-23, this Air Quality Permit shall be final and binding 30 days after issuance.

Ms. Rosaasen XXX xx, 2017 Page 2

You may request modification of your Air Quality Permit through informal means pursuant to NCGS 150B-22. This request must be submitted in writing to the Director and must identify the specific provisions or issues for which the modification is sought. Please note that this Air Quality Permit will become final and binding regardless of a request for informal modification unless a request for a hearing is also made under NCGS 150B-23.

The construction of new air pollution emission source(s) and associated air pollution control device(s), or modifications to the emission source(s) and air pollution control device(s) described in this permit must be covered under an Air Quality Permit issued by the Division of Air Quality prior to construction unless the Permittee has fulfilled the requirements of NCGS 143-215-108A(b) and received written approval from the Director of the Division of Air Quality to commence construction. Failure to receive an Air Quality Permit or written approval prior to commencing construction is a violation of NCGS 143-215.108A and may subject the Permittee to civil or criminal penalties as described in NCGS 143-215.114A and 143-215.114B.

Gaston County has triggered increment tracking under PSD for  $PM_{10}$ ,  $SO_2$ , and  $NO_x$  emissions. However, this PSD modification will not consume or expand increments for any pollutants.

This Air Quality Permit shall be effective from XXX xx, 2017 until October 31, 2018 is nontransferable to future owners and operators, and shall be subject to the conditions and limitations as specified therein. Should you have any questions concerning this matter, please contact Gautam Patnaik, P.E. at (919) 707-8735.

Sincerely yours,

William D. Willets, P.E., Chief, Permitting Section Division of Air Quality, NCDENR

#### Enclosure

c: Heather Ceron, EPA Region 4
Mooresville Regional Office
Central Files
Connie Horne (cover letter only)

#### ATTACHMENT to Permit No. 03926T45

Insignificant Activities Pursuant to 15A NCAC 2Q .0503(8)

Emission Source ID No.	Emission Source Description
IES-1	10,000 gallon antifreeze tank
IES-2	two 10,000 gallon diesel fuel tanks
IES-3	two 10,000 gailon dieser fact tanks
IES-4	three 10,000 gallon purge solvent tanks
IES-5	
IES-6	
IES-7	miscellaneous combustion sources (except BLR-02 and BLR-05, and all paint drying ovens)
IES-8	one distillation unit with exhaust
IES-9	Two Propane Vaporizers (1.440 MMBtu/hr and 0.833 MMBtu/hr maximum heat input each)
IES-10	Four (4) Cooling Towers (Total circulation rate 24,000 gpm)
IES-11	Multiple Parts Washers
IES-12	Two dynamometers for truck diagnostics testing
IES-13	Truck tail pipe exhaust are for truck diagnostics testing
IES-14	10,000 gallon antifreeze tank
IES-15	Western Star welding operations
IES-EC-3A	One Cab Pretreatment Line consisting of: spray pre-clean/degrease,
MACT Subpart	immersion pre-clean/degrease,
MMMM and	spray rinse,
PPPP	immersion rinse,
RACT	spray rinse,
	immersion DI rinse with re-circulated DI water,
IECED1 dhuana 1	spray DI rinse with fresh DI water
IESFP1 through IESFP3	Emergency fire pumps with diesel fired engines with ratings of 182, 240 and 240 hp,
(MACT, Subpart	respectively.
ZZZZ)	
IES-GEN	Natural gas fired emergency generator (131.4 hp)
MACT, Subpart	
ZZZZ	
NSPS Subpart	
JJJJ	

- 1. Because an activity is insignificant does not mean that the activity is exempted from an applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement.
- 2. When applicable, emissions from stationary source activities identified above shall be included in determining compliance with the permit requirements for toxic air pollutants under 15A NCAC 2D .1100, "Control of Toxic Air Pollutants", or 15A NCAC 2Q .0711, "Emission Rates Requiring a Permit".
- 3. For additional information regarding the applicability of MACT or GACT see the DAQ page titled "Specific Permit Conditions Regulatory Guide." The link to this site is as follows: <a href="http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.">http://deq.nc.gov/about/divisions/air-quality/air-quality-permits/specific-permit-conditions-regulatory-guide.</a>

#### **ATTACHMENT II:**

# Summary of Changes to Permit (Permit No. 03926T45)

Pages	Section	Description of Changes
	Insignificant	Added Western Star welding operations (IES-15)
	Activities	
8	2.1 B. Summary	Changed BACT limit from 1,365 tons/yr of VOC to 750 tons/yr of
	table of limits	VOC
	and standards	
10	2.1 B. 4. a. i.,	Changed BACT limit from 1,365 tons/yr of VOC to 750 tons/yr of
		VOC
26	2.3 A. a. i).,	Changed Actuals PAL from 316.9 to 750.6 tons per year of VOC
		emissions
26	2.3 A. a. i). &	Change of effective and expiration date of the VOC PAL
	ii).,	
29	2.3 B. iii).,	Changed Actuals PAL from 316.9 to 750.6 tons per year of VOC
		emissions
	2.4	On Permit 03926T44 – Removed.



# State of North Carolina Department of Environmental Quality Division of Air Quality

### AIR QUALITY PERMIT

Permit No.	Replaces Permit No.	Effective Date	Expiration Date
03926T <mark>45</mark>	03926T44	XXX xx, 2017	October 31, 2018

Until such time as this permit expires or is modified or revoked, the below named Permittee is permitted to construct and operate the emission source(s) and associated air pollution control device(s) specified herein, in accordance with the terms, conditions, and limitations within this permit. This permit is issued under the provisions of Article 21B of Chapter 143, General Statutes of North Carolina as amended, and Title 15A North Carolina Administrative Codes (15A NCAC), Subchapters 2D and 2Q, and other applicable Laws.

Pursuant to Title 15A NCAC, Subchapter 2Q, the Permittee shall not construct, operate, or modify any emission source(s) or air pollution control device(s) without having first submitted a complete Air Quality Permit Application to the permitting authority and received an Air Quality Permit, except as provided in this permit.

Permittee: Daimler Trucks North America LLC

Facility ID: 3600153

Facility Site Location: 1800 North Main Street

City, County, State, Zip: Mount Holly, Gaston County, North Carolina, 28120

Mailing Address: 1800 North Main Street

City, County, State, Zip: Mount Holly, Gaston County, North Carolina, 28120

Application Number: 3600153.16A Complete Application Date: XXX xx, 2017

Primary SIC Code: 3711

Division of Air Quality, Mooresville Regional Office

Regional Office Address: 610 East Center Avenue, Suite 301 Mooresville, North Carolina 28115

Permit issued this the xx of XXX, 2017

\_\_\_\_\_

#### **Table of Contents**

SECTION 1: PERMITTED EMISSION SOURCE(S) AND ASSOCIATED

AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

SECTION 2: SPECIFIC LIMITATIONS AND CONDITIONS

- 2.1- Emission Source(s) Specific Limitations and Conditions (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.2- Multiple Emission Source(s) Specific Limitations and Condition (Including specific requirements, testing, monitoring, recordkeeping, and reporting requirements)
- 2.3- Actuals PAL Permit Requirements

SECTION 3: GENERAL PERMIT CONDITIONS

ATTACHMENT List of Acronyms

# SECTION 1 - PERMITTED EMISSION SOURCE(S) AND ASSOCIATED AIR POLLUTION CONTROL DEVICE(S) AND APPURTENANCES

The following table contains a summary of all permitted emission sources and associated air pollution control devices

and appurtenances:

Emission Source ID No.	<b>Emission Source Description</b>	Control Device ID No.	Control Device Description	
	Spray Coating and Assembly Operations consisting of:			
(ES-SCAO) PSD BACT MACT Subpart MMMM and PPPP RACT	<ul> <li>Spray Coating and Assembly Operation consisting of:</li> <li>Fifteen paint spray booths (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust);</li> <li>Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2);</li> <li>One flash off area (ES-Flashoff Area);</li> <li>Three sanding booths (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);</li> <li>One ECoat operations (ES-ECoat), consisting of the following equipment:  Two 12,000 gallon RO Storage tanks;  One 22,000 gallon E-coat transfer tanks;  One 12,000 gallon E-coat transfer tanks;</li> <li>One 12,000 gallon fresh resin storage tank;</li> <li>Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1);</li> <li>One paint mix room/storage area (ES-PMR1) and</li> <li>One paint mix room/storage area (ES-PMR2)</li> </ul>	NA	NA NA	

Boiler)

Emission Source ID No.	Emission Source Description	Control Device ID No.	Control Device Description
ES-WE-2	5th wheel welding with in-line duct filters	NA	NA
ES-WE-5	fuel tank welding with in-line duct filters	NA	NA
ES-BLR-02 and ES- BLR-05 NSPS Dc, 112(j)	two (2) natural gas/propane/No. 2 fuel oil fired boilers (33.6 million Btu/hr maximum heat input each)	NA	NA
ES-ECoat-Boiler 112(j)	one (1) natural gas fired boiler (5.5 million Btu/hr maximum heat input)	NA	NA

#### **SECTION 2 - SPECIFIC LIMITATIONS AND CONDITIONS**

# 2.1- Emission Source(s) and Control Devices(s) Specific Limitations and Conditions

The emission source(s) and associated air pollution control device(s) and appurtenances listed below are subject to the following specific terms, conditions, and limitations, including the testing, monitoring, recordkeeping, and reporting requirements as specified herein:

A. Two Natural Gas/Propane/No. 2 Fuel Oil-fired Boilers (33.6 MMBtu/hr maximum heat input each, ID Nos. ES-BLR-02 and ES-BLR-05)

One Natural Gas-fired Boiler (5.5 MMBtu/hr maximum heat input, ID No. ES-ECoat-

The following table provides	a summary of limits and	standards for the emissi	on source(s) described above	
The following table provides	a summary of minus and	standards for the chilssi	ion source(s) described above	/ ·

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	Affected Sources: ES-BLR-02 and ES-BLR-05	15A NCAC 2D .0503
	0.336 pounds per million Btu heat input	
	Affected Sources: ES-ECoat-Boiler	
	0.36 pounds per million Btu heat input	
sulfur dioxide	2.3 pounds per million Btu heat input	15A NCAC 2D .0516
visible emissions	20 percent opacity	15A NCAC 2D .0521
sulfur dioxide	Affected Sources: ES-BLR-02 and ES-BLR-05	15A NCAC 2D .0524 (40
	0.5 percent sulfur content of fuel oil	CFR Part 60 Subpart Dc)
visible emissions	Affected Sources: ES-BLR-02 and ES-BLR-05	15A NCAC 2D .0524 (40
	20 percent opacity	CFR Part 60 Subpart Dc)
hazardous air	Best Combustion Practices	15A NCAC 2D .1109
pollutants		[CAA § 112(j)]

#### 1. 15A NCAC 2D .0503: PARTICULATES FROM FUEL BURNING INDIRECT HEAT EXCHANGERS

- a. Emissions of particulate matter from the combustion of natural gas/propane and No. 2 fuel oil that are discharged from Boilers 2 and 5 (**ID Nos. ES-BLR-02 and ES-BLR-05**) into the atmosphere shall not exceed 0.336 pounds per million Btu heat input.
- b. Emissions of particulate matter from the combustion of natural gas/propane and No. 2 fuel oil that are discharged from the Coat Boiler (**ID No. ES-ECoat-Boiler**) into the atmosphere shall not exceed 0.36 pounds per million Btu heat input.

#### **Testing** [15A NCAC 2Q .0508(f)]

c. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.1.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0503.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

d. No monitoring/recordkeeping/reporting is required for particulate emissions from the firing of natural gas, propane, and No. 2 oil in these sources.

#### 2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the firing of natural gas, propane, and No. 2 fuel oil in these sources shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard.

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 A.2.a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

#### c. Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas, propane, and No. 2 fuel oil in these sources.

#### 3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these boilers shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

**Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 A.3. a., above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring/recordkeeping/reporting is required for visible emissions from the firing of natural gas, propane, and No. 2 fuel oil in these sources.

#### 4. 15A NCAC 2D .0524: NSPS 40 CFR 60, SUBPART Dc

a. The Permittee shall comply with all applicable provisions, including the notification, testing, reporting, recordkeeping, and monitoring requirements contained in Environmental Management Commission Standard 15A NCAC 2D .0524 "New Source Performance Standards (NSPS) as promulgated in 40 CFR Part 60 Subpart Dc, including Subpart A "General Provisions."

#### Emission Limitations [15A NCAC 2D .0524]

- b. The maximum sulfur content of any fuel oil received and burned in the affected boilers (**ID Nos. ES-BLR-02** and **ES-BLR-05**) shall not exceed 0.5 percent by weight.
- c. Visible emissions from these sources when firing No. 2 fuel oil shall not be more than 20 percent opacity when averaged over a six-minute period, except for one six-minute period per hour of not more than 27 percent opacity.

#### **Testing** [15A NCAC 2Q .0508(f)]

d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above any limit given in Section 2.1 A.4.b. or c. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524.

#### Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

- e. In addition to any other applicable recordkeeping required by 40 CFR 60.48c or recordkeeping requirements of the EPA, the Permittee shall record and maintain records of the amounts of each fuel fired during each month. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if these records are not maintained.
- f. The Permittee shall retain a copy of the fuel supplier certification for any No. 2 fuel oil fired at the affected boilers. The fuel supplier certification shall include the following information:
  - i. The name of the oil supplier;
  - ii. A statement from the oil supplier that the oil complies with the specification under the definition of distillate oil in 40 CFR 60.41c; and
  - iii. A certified statement signed by the owner or operator of an affected facility that the records of fuel supplier certification submitted represents all of the fuel fired during the semi annual period.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0524 if the sulfur content of the oil exceeds the limit provided in Section 2.1 A.4.b. of this permit or if fuel supplier certifications are not retained as described above.

#### **Reporting** [15A NCAC 2Q .0508(f)]

- g. In addition to any other reporting required by 40 CFR 60.48c or notification requirements to the EPA, the Permittee is required to provide a semiannual summary report, acceptable to the Regional Air Quality Supervisor, of the sulfur content of the distillate fuel oil fired by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. The summary report shall include the following information:
  - i. Fuel supplier certification(s) for distillate fuel oil, as provided in Section 2.1 A.4.f. of this permit;
  - ii. A certified statement signed by the owner or operator that the records of fuel supplier certification(s) submitted represents all of the fuel fired at the affected boilers during the semiannual period; and,
  - iii. All instances of deviations from the requirements of this permit must be clearly identified.

#### 5. 15A NCAC 2D .1109: CAA § 112(j); Case-by-Case MACT for Boilers & Process Heaters

a. The Permittee shall use best combustion practices when operating the affected boilers (ID Nos. ES-BLR-02,

**ES-BLR-05, and ES-ECoat-Boiler**). The initial compliance date for this work practice standard and the associated monitoring, recordkeeping, and reporting requirements is **November 16, 2013**. These conditions need not be included on the annual compliance certification until after the initial compliance date.

#### Monitoring [15A NCAC 2Q .0508(f)]

- b. To assure compliance, the Permittee shall perform an annual boiler inspection and maintenance as recommended by the manufacturer, or as a minimum, the inspection and maintenance requirement shall include the following:
  - i. Inspect the burner, and clean or replace any components of the burner as necessary;
  - ii. Inspect the flame pattern and make any adjustments to the burner necessary to optimize the flame pattern;
  - iii. Inspect the system controlling the air-to-fuel ratio, and ensure that it is correctly calibrated and functioning properly.

The Permittee shall conduct at least one tune-up per calendar year to demonstrate compliance with this requirement. The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if the affected boilers are not inspected and maintained as required above.

#### Recordkeeping [15A NCAC 2Q .0508(f)]

- c. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) onsite and made available to an authorized representative upon request. The logbook shall record the following:
  - i. The date of each recorded action;
  - ii. The results of each inspection; and,
  - iii. The results of any maintenance performed on the boilers.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1109 if these records are not maintained.

#### **Reporting** [15A NCAC 2Q .0508(f)]

d. No reporting is required for hazardous air pollutants from the firing of propane, natural gas, and/or No. 2 fuel oil in these boilers.

#### B. Spray Coating and Assembly Operation (ES-SCAO) consisting of

- Fifteen paint spray booths
  - (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust);
- Five paint drying ovens
  - (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2);
- One flash off area (ES-Flashoff Area);
- Three sanding booths
- (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);
- One (1) ECoat operations (ES-ECoat), consisting of the following equipment:
  - Two (2) 12,000 gallon RO Storage tanks;
  - Two (2) 12,000 gallon RO rinse tanks;
  - One (1) 22,000 gallon E-coat tank;
  - Two (2) 11,000 gallon E-coat transfer tanks;
  - One (1) 12,000 gallon permeate waste transfer tank and
  - One (1) 6,000 gallon fresh resin storage tank;
- Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1);
- One (1) paint mix room/storage area (ES-PMR1) and
- One (1) paint mix room/storage area (ES-PMR2)

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	E=4.10 $P$ <sup>0.67</sup> where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
sulfur dioxide	Drying ovens (Id Nos. ES-PDO-1 through ES-PDO-5) 2.3 pounds per million Btu heat input	15A NCAC 2D .0516
visible emissions	20 percent opacity	15A NCAC 2D .0521
odors	<b>State-enforceable only-</b> odorous emissions- See Section 2.2B.2.	15A NCAC 2D .1806
volatile organic compounds	Meet Prevention of Significant Deterioration BACT limits:  3.5 lb VOC /gal as applied calendar monthly avg. and 750 tons/yr VOC See 2.1 B. 4.	15A NCAC 2D .0530
	Petition for Alternative to RACT See 2.2 B.	15A NCAC 2D .0952 for 15A NCAC 2D .0967
volatile organic compounds	Work practice standards-See Section 2.2 C.5.	15A NCAC 2D .0958
hazardous air	40 CFR 63 Subpart PPPP - See Section 2.2 D.1.	15A NCAC 2D .1111

Regulated Pollutant	Limits/Standards	Applicable Regulation
pollutants	40 CFR 63 Subpart MMMM - See Section 2.2 D.2.	

#### 1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from the Spray Coating and Assembly Operation (ES-SCAO) consisting of Fifteen paint spray booths (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust); Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2); One flash off area (ES-Flashoff Area); Three sanding booths (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);

one ECoat operations (ES-ECoat), various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1), one paint mix room/storage area (ES-PMR1) and one paint mix room/storage area (ES-PMR2) shall not exceed an allowable emission rate as calculated by the following equation: [15A NCAC 2D .0515(a)]

 $E=4.10\;x\;P^{\;0.67}$  Where

E = allowable emission rate in pounds per hour

P = process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

#### Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

c. No monitoring, recordkeeping or reporting is required.

#### 2. 15A NCAC 2D .0516: SULFUR DIOXIDE EMISSIONS FROM COMBUSTION SOURCES

a. Emissions of sulfur dioxide from the five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2) shall not exceed 2.3 pounds per million Btu heat input. Sulfur dioxide formed by the combustion of sulfur in fuels, wastes, ores, and other substances shall be included when determining compliance with this standard. [15A NCAC 2D .0516]

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ found in Section 3. If the results of this test are above the limit given in Section 2.1 B. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0516.

#### c. Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

No monitoring/recordkeeping/reporting is required for sulfur dioxide emissions from the firing of natural gas or propane in these sources.

#### 3. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from Spray Coating and Assembly Operation (ES-SCAO) consisting of Fifteen paint spray booths (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust); Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2); One flash off area (ES-Flashoff Area); Three sanding booths (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);

One ECoat operations (ES-ECoat), various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1), one paint mix room/storage area (ES-PMR1) and

one paint mix room/storage area (ES-PMR2) shall not be more than 20 percent opacity when averaged over a six-minute period. /However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity. [15A NCAC 2D .0521 (d)]

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.3. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

#### **Monitoring** [15A NCAC 2Q .0508(f)]

- c. To assure compliance, semi-annually, the Permittee shall observe the emission points of these sources for any visible emissions above normal. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - ii. demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2Q .0508(f) is below the limit given in Section 2.1 B. 3. a above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

#### **Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

#### **Reporting** [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 4. 15A NCAC 2D. 0530: PREVENTION OF SIGNIFICANT DETERIORATION

- a. i. In order to comply with this regulation, the above PSD designated emission sources in the spray coating and assembly operations (ES-SCAO), shall discharge into the atmosphere no more than 750 tons per year of volatile organic compounds per consecutive 12-month period, and the VOC content of the coatings used at the facility shall not exceed 3.5 pounds per gallon as applied on a calendar monthly average basis. [15A NCAC 2D .0530]
  - ii. The Spray Coating and Assembly Operation (ES-SCAO) shall comply with MACT Subpart PPPP (Section 2.2 D.1., of the permit) **And** MACT Subpart MMMM (Section 2.2 D. 2., of the permit).

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 B.4. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530.

#### c. Reserved

#### Monitoring/Recordkeeping [15A NCAC 2Q .0508 (f)]

- d. To ensure compliance with the above limitation, the following restrictions shall apply:
  - i. The VOC content of the coatings used at the facility shall not exceed 3.5 pounds per gallon as applied on a calendar monthly average basis,
  - ii. The coating usage shall be recorded daily,
  - iii. All coatings used in each calendar month shall be used to determine compliance with this limit and the annual limit in 2.1 B, 4. a. above,
  - iv. VOC emissions from cleanup solvent, caulks, glues, seamseals, and other non-coating sources of VOC are subject to a BACT workplace standard and are not subject to the 3.5 pounds of VOC per gallon calendar monthly average spray coating BACT limit in 2.1 B. 4. c. i.. VOC emissions from the cleanup solvent, caulks, glues, seamseals, and other non-coating sources of VOC shall be included and must comply with the annual 12-month rolling limit in 2.1 B. 4. a., and
  - v. Calculations verifying the above restrictions shall be provided by the Permittee using records of actual solvent usage and shall be maintained in a log on a monthly basis.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0530 if the above records are not maintained or if VOC emissions, as calculated in v. above exceed the limit in 2.1 B.4.a.

#### **Reporting** [15A NCAC 2Q .0508 (f)]

- e. For compliance purposes, The Permittee shall submit a semi-annual summary report, acceptable to the Regional Air Quality Supervisor, of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December, and July 30 of each calendar year for the preceding six-month period between January and June. The report shall contain the following:
  - i. The calendar monthly average coatings content of VOC for each month in the reporting period, and
  - ii. The monthly VOC emissions for the previous 17 months. The emissions must be calculated for each of the 12-month periods over the previous 17 months.
- f. Combustion by-product VOC emissions from the spray coating and assembly operations are excluded from the VOC BACT emissions limits listed above.
- g. VOC emissions from the storage of all fluids, solvents, etc. at the facility are excluded from the VOC BACT emissions limits listed above.

#### 5. 15A NCAC 2D .0958: WORK PRACTICES FOR SOURCES OF VOLATILE ORGANIC COMPOUNDS

- a. Pursuant to 15A NCAC 2D .0958, for all sources that use volatile organic compounds (VOC) as solvents, carriers, material processing media, or industrial chemical reactants, or in similar uses that mix, blend, or manufacture volatile organic compounds, or emit volatile organic compounds as a product of chemical reactions; the Permittee shall:
  - i. store all material, including waste material, containing volatile organic compounds in tanks or in containers covered with a tightly fitting lid that is free of cracks, holes, or other defects, when not in use,
  - ii. clean up spills of volatile organic compounds as soon as possible following proper safety procedures,
  - iii. store wipe rags containing volatile organic compounds in closed containers,
  - iv. not clean sponges, fabric, wood, paper products, and other absorbent materials with volatile organic compounds,
  - v. transfer solvents containing volatile organic compounds used to clean supply lines and other coating equipment into closable containers and close such containers immediately after each use, or transfer such solvents to closed tanks, or to a treatment facility regulated under section 402 of the Clean Water Act,
  - vi. clean mixing, blending, and manufacturing vats and containers containing volatile organic compounds by adding cleaning solvent and close the vat or container before agitating the cleaning solvent. The spent cleaning solvent shall then be transferred into a closed container, a closed tank or a treatment
- b. When cleaning parts with a solvent containing a volatile organic compound, the Permittee shall:
  - i flush parts in the freeboard area,
  - ii. take precautions to reduce the pooling of solvent on and in the parts,
  - iii. tilt or rotate parts to drain solvent and allow a minimum of 15 seconds for drying or until all dripping has

stopped, whichever is longer,

- iv. not fill cleaning machines above the fill line,
- v. not agitate solvent to the point of causing splashing. [15A NCAC 2D .0958(d)]

#### **Monitoring** [15A NCAC 2Q .0508 (f)]

c. To assure compliance with paragraphs (a) and (b) above, the Permittee shall, at a minimum, perform a visual inspection once per month of all operations and processes utilizing volatile organic compounds. The inspections shall be conducted during normal operations. If the required inspections are not conducted the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

#### Recordkeeping [15A NCAC 2Q .0508 (f)]

- d. The results of the inspections shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each inspection; and
  - ii. the results of each inspection noting whether or not noncompliant conditions were observed. If the required records are not maintained the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0958.

#### **Reporting** [15A NCAC 2Q .0508 (f)]

e. The Permittee shall submit a summary report of the observations postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### C. Reserved

## D. Welding Operations - consisting of 5th Wheel Welding (ID No. ES-WE-2) and Fuel Tank Welding (ID No. ES-WE-5) with associated in-line duct filters

The following table provides a summary of limits and standards for the emission source(s) described above:

Regulated Pollutant	Limits/Standards	Applicable Regulation
particulate matter	$E=4.10P^{0.67}$ where E = allowable emission rate in pounds per hour P = process weight in tons per hour	15A NCAC 2D .0515
visible emissions	20 percent opacity	15A NCAC 2D .0521

#### 1. 15A NCAC 2D .0515: PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

a. Emissions of particulate matter from these sources shall not exceed an allowable emission rate as calculated by the following equation:

$$E = 4.10 \ x \ P^{0.67}$$
 Where  $E =$  allowable emission rate in pounds per hour  $P =$  process weight in tons per hour

Liquid and gaseous fuels and combustion air are not considered as part of the process weight.

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D. 1. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515.

#### Monitoring/Recordkeeping [15A NCAC 2Q .0508(f)]

c. Particulate matter emissions from the axle welding, 5th wheel welding, FL-90, Pool 35, fuel tank welding and laser welding shall be controlled by in-line duct filters. To assure compliance, the Permittee shall monitor the mechanical integrity of the in-line filters. Freightliner will conduct monthly visual inspections and maintenance of the in-line filters and system.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if the in-line filters are not inspected and maintained.

- d. The results of inspection and maintenance shall be maintained in a logbook (written or electronic format) onsite and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action;
  - ii. the results of each inspection;
  - iii. the results of any maintenance performed on the filter system; and
  - iv. any variance from manufacturers recommendations, if any, and corrections made.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0515 if these records are not maintained.

#### **Reporting** [15A NCAC 2Q .0508(f)]

- e. The Permittee shall submit the results of any maintenance performed on the in-line filters within 30 days of a written request by the DAQ.
- f. The Permittee shall submit a summary report of monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### 2. 15A NCAC 2D .0521: CONTROL OF VISIBLE EMISSIONS

a. Visible emissions from these welding operations (**ID Nos. ES-WE-2 and ES-WE-5**) shall not be more than 20 percent opacity when averaged over a six-minute period. However, six-minute averaging periods may exceed 20 percent not more than once in any hour and not more than four times in any 24-hour period. In no event shall the six-minute average exceed 87 percent opacity.

#### **Testing** [15A NCAC 2Q .0508(f)]

b. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this test are above the limit given in Section 2.1 D. 2. a. above, the Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521.

#### Monitoring [15A NCAC 2Q .0508(f)]

- c. To assure compliance, once a month the Permittee shall observe the emission points of these sources for any visible emissions above normal. The monthly observation must be made for each month of the calendar year period to ensure compliance with this requirement. If visible emissions from these sources are observed to be above normal, the Permittee shall either:
  - i. take appropriate action to correct the above-normal emissions as soon as practicable and within the monitoring period and record the action taken as provided in the recordkeeping requirements below, or
  - demonstrate that the percent opacity from the emission points of the emission source in accordance with 15A NCAC 2Q .0508(f) is below the limit given in Section 2.1 D. 2. a. above.

If the above-normal emissions are not corrected per (i) above or if the demonstration in (ii) above cannot be made, the Permittee shall be deemed to be in noncompliance with 15A NCAC 2D .0521.

#### **Recordkeeping** [15A NCAC 2Q .0508(f)]

- d. The results of the monitoring shall be maintained in a logbook (written or electronic format) on-site and made available to an authorized representative upon request. The logbook shall record the following:
  - i. the date and time of each recorded action:
  - ii. the results of each observation and/or test noting those sources with emissions that were observed to be in noncompliance along with any corrective actions taken to reduce visible emissions; and
  - iii. the results of any corrective actions performed.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .0521 if these records are not maintained.

#### **Reporting** [15A NCAC 2Q .0508(f)]

e. The Permittee shall submit a summary report of the observations by January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified.

#### E. Reserved

#### F. Reserved

#### 2.2 - Multiple Emission Source(s) Specific Limitations and Conditions

#### A. Reserved.

B. Spray Coating and Assembly Operation (ES-SCAO) consisting of

Fifteen paint spray booths (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust); Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2); One flash off area (ES-Flashoff Area); Three sanding booths (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);

One ECoat operations (ES-ECoat), various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1), one paint mix room/storage area (ES-PMR1) and one paint mix room/storage area (ES-PMR2)

### 1. 15A NCAC 02D .0952: PETITION FOR ALTERNATIVE CONTROLS FOR RACT for 15A NCAC 02D .0967: MISCELLANEOUS METAL AND PLASTIC PARTS COATINGS

- a. This Rule applies to application areas, flashoff areas, ovens and other processes that are used in the coating of metal parts and products of the following types of manufacturing plants [15A NCAC 02D 0934(b)]:
  - i. any other manufacturing plant that coats metal parts or products [15A NCAC 02D 0934(b)(7)]
- b. If the owner or operator of any source of volatile organic compounds, subject to the requirements of this Section, can demonstrate that compliance with rules in this Section would be technologically or economically infeasible, he may petition the Director to allow the use of alternative operational or equipment controls for the reduction of volatile organic compound emissions. Petition shall be made for each source to the Director [5A NCAC 02D 0952(c)]
- c. Controls different from those specified in the appropriate emission standards in this Section are approved by the Director, the permit contains a condition stating such controls follows [15A NCAC 2D .0952(f)]:
  - The Permittee has "installed and operates reasonable available control technology" as the MACT Subpart MMMM and PPPP meets the requirements of RACT<sup>1</sup>.
  - ii. Final compliance was demonstrated for existing source RACT no later than **April 1, 2009** [15A NCAC 2D .0909(d)(1)(c)]
- d. The Permittee shall comply with the applicable MACT standards as per 2.2 D.1. and 2. below including all emissions limits and work practice standards contained therein.

<sup>1</sup> See *Federal Register*/Volume 70, No. 288/Tuesday, November 29, 2005/Rules and Regulations/ 71653-71655

#### Monitoring/Recordkeeping/Reporting [15A NCAC 2Q .0508(f)]

e. The monitoring, recordkeeping and reporting requirements required by the Miscellaneous Metal Parts and Products Surface Coating (40 CFR Part 63 Subpart MMMM) and Plastic Parts and Products Surface Coating (40 CFR Part 63 Subpart PPPP) as found in 2.2 D. 1. and 2. shall be followed.

#### C. Facility-wide emission sources

The following table provides a summary of limits and standards applicable facility wide:

Regulated Pollutant	Limits/Standards	Applicable Regulation
odors	Odorous emissions must be controlled; <b>State</b>	15A NCAC 2D .1806
	enforceable only	

### 1. <u>STATE-ONLY REQUIREMENT</u>: 15A NCAC 2D .1806: CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

a. The Permittee shall not operate the facility without implementing management practices or installing and operating odor control equipment sufficient to prevent odorous emissions from the facility from causing or contributing to objectionable odors beyond the facility's boundary.

# D. Sources subjected to National Emission Standards for Hazardous Air Pollutants for Miscellaneous Metal Parts and Products Surface Coating (40 CFR Part 63 Subpart MMMM) and Plastic Parts and Products Surface Coating (40 CFR Part 63 Subpart PPPP)

Spray Coating and Assembly Operation (ES-SCAO) consisting of

Fifteen paint spray booths (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust); Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2); One flash off area (ES-Flashoff Area); Three sanding booths (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);

one ECoat operations (ES-ECoat), various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1), one paint mix room/storage area (ES-PMR1) and one paint mix room/storage area (ES-PMR2).

#### 1. 15A NCAC 2D .1111, Maximum Achievable Control Technology-40 CFR 63, Subpart PPPP

a. The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart PPPP, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products", for the above existing affected sources.

#### Emission Limits [40 CFR 63.4490]

b. For each existing general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

#### **Compliance Options** [40 CFR 63.4491]

c. The Permittee shall include all coatings, thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in Section 2.2 D.1.b. above. To make this determination, the Permittee shall use at least one of the following two compliance options. The Permittee may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. The Permittee may use different compliance options for different coating operations, or at different times on the same coating operation. The Permittee may employ different compliance options when different coatings

are applied to the same part, or when the same coating is applied to different parts. However, the Permittee may not use different compliance options at the same time on the same coating operation. If the Permittee switches between compliance options for any coating operation or group of coating operations, he shall document this switch as required by Section 2.2 D.1.g.iii below, and shall report it in the next semiannual compliance report required in Section 2.2 D.1.h below.

- i. <u>Compliant material option.</u> Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in Section 2.2 D.1.b. above, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. The Permittee shall meet all of the following requirements to demonstrate compliance with the applicable emission limit using this option:
  - A. The demonstration shall include the calculations and supporting documentation showing that during the initial compliance period, the Permittee used no coating with an organic HAP content that exceeded the applicable emission limit in Section 2.2 D.1.b. above, and that he used no thinners and/or other additives, or cleaning materials that contained organic HAP.
  - B. The Permittee may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the emission rate without add-on controls option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in Section 2.2 D.1.b. above and must use no thinner and/or other additive, or cleaning material that contains organic HAP. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. The Permittee does not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.
    - 1. <u>Determine the mass fraction of organic HAP for each material used.</u> The Permittee shall determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the following options:
      - (a). Method 311 (appendix A to 40 CFR part 63). The Permittee may use Method 311 for determining the mass fraction of organic HAP by using the following procedures:
        - (i). Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, the Permittee does not have to count it. Express the mass fraction of each organic HAP for which the Permittee counts, as a value truncated to four places after the decimal point (e.g., 0.3791)
        - (ii). Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point (e.g., 0.763).
      - (b). Method 24 (appendix A to 40 CFR part 60). For coatings, the Permittee may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. The Permittee may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.
      - (c). <u>Alternative method.</u> The Permittee may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. The Permittee shall follow the procedure in 63.7(f) to submit an alternative test method for approval.

- (d). Information from the supplier or manufacturer of the material. The Permittee may rely on information other than that generated by the test methods specified in Section 2.2 C.1.c.i.D.1. (a) through (c) above, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, the Permittee does not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, the Permittee may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to Section 2.2 C.1.c.i.D.1. (a) through (c) above, then the test method results will take precedence unless, after consultation, the Permittee demonstrates to the satisfaction of DAQ that the formulation data are correct.
- (e). Solvent blends. Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP, which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, the Permittee may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this Subpart. If the Permittee uses the tables, he shall use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and may use Table 4 only if the solvent blends in the materials do not match any of the solvent blends in Table 3 and he knows only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, he demonstrates to the satisfaction of DAQ that the formulation data are correct.
- 2. Determine the mass fraction of coating solids for each coating. The Permittee shall determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in Section 2.2.D.1.c.i.B.2. (a) through (c) below.
  - (a). Method 24 (appendix A to 40 CFR part 60). The Permittee may use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, you may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.
  - (b). <u>Alternative method</u>. The Permittee may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in Sec. 63.7(f) to submit an alternative test method for approval.
  - (c). Information from the supplier or manufacturer of the material. The Permittee may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation the Permittee demonstrates to the satisfaction of the DAQ that the formulation data are correct.
- 3. Calculate the organic HAP content of each coating. The Permittee may determine the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using the following equation:

$$H_c = \frac{W_c}{S_c} \qquad (Eq. 1)$$

Where: Hc = Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

- Wc = Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to Section 2.2 D.1.c.i.B.1 above.
- Sc = Mass fraction of coating solids, kg coating solids per kg coating, determined according to Section 2.2 D.1.c.i.B.2 above.
- 4. Compliance demonstration. The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in Section 2.2 D.1.b. above; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to Section 2.2 D.1.c.i.B.1 above. The Permittee shall keep all records required by Section 2.2 D.1.g below. As part of the notification of compliance status required in Section 2.2 D.1.f below, the Permittee shall identify the coating operation(s) for which he used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.2 D.1.b. above, and he used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in Section 2.2 D.1.c.i.B.1 above.
- C. 1. For each compliance period to demonstrate continuous compliance, the Permittee shall use no coating for which the organic HAP content (determined using Equation 1 of Section 2.2 D.1.c.i.B.3 above) exceeds the applicable emission limit in Section 2.2 D.1.b. above, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to Section 2.2 D.1.c.i.B.1 above. A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in Section 2.2 D.1.c.i.A above, is the end of a compliance period consisting of that month and the preceding 11 months.
  - 2. If the Permittee chooses to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in Section 2.2 D.1.c.i.C.1 above is a deviation from the emission limitations that must be reported as specified in Section 2.2 D.1.f.vi below and/or Section 2.2 D.1.h.ix below.
  - 3. As part of each semiannual compliance report required by Section 2.2 D.1.h below, the Permittee shall identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in Section 2.2 D.1.b. above, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because he used no coatings for which the organic HAP content exceeded the applicable emission limit in Section 2.2 D.1.b. above, and he used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to Section 2.2 D.1.c.i.B.1 above.
  - 4. The Permittee shall maintain records as specified in Section 2.2 D.1.g below.
- ii. Emission rate without add-on controls option. Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in Section 2.2 D.1.b. above, calculated as a rolling 12-month emission rate and determined on a monthly basis. The Permittee shall meet all of the following requirements to demonstrate compliance with the emission limit using this option.
  - A. The Permittee shall determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The demonstration shall include the calculations according to Section 2.2 D.1.c.ii.B below and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in Section 2.2 D.1.b. above.
  - B. The Permittee may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. The Permittee shall use the compliant material option for any coating operation in the affected source for which he does not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in Section 2.2 D.1.b. above. When calculating the organic HAP emission rate according to this section, do not include any coatings,

thinners and/or other additives, or cleaning materials used on coating operations for which the Permittee uses the compliant material option. The Permittee does not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that he received back the exact same materials that were sent off-site) and reused in the coating operation for which he uses the emission rate without add-on controls option. If the Permittee uses coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

- 1. <u>Determine the mass fraction of organic HAP for each material</u>. Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in Section 2.2 D.1.c.i.B.1 above.
- 2. <u>Determine the mass fraction of coating solids</u>. Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in Section 2.2 D.1.c.i.B.2 above.
- 3. Determine the density of each material. Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475-98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see 63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-98 and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of DAQ that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 below.
- 4. <u>Determine the volume of each material used</u>. Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If the Permittee purchases materials or monitors consumption by weight instead of volume, he does not need to determine the volume of each material used. Instead, the Permittee may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C and 2 below.
- 5. Calculate the mass of organic HAP emissions. The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w$$
 (Eq. 1)

Where: He = Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

Rw = Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to Section 2.2 D.1.c.ii.B.5.d below. (The Permittee may assign a value of zero to RW if he does not wish to use this allowance.)

(a). Calculate the kg of organic HAP in the coatings used during the month using Equation 1A below:

$$A = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i})$$
 (Eq. 1A)

Where: A = Total mass of organic HAP in the coatings used during the month, kg

Vol<sub>c,i</sub> = Total volume of coating, i, used during the month, liters.

D<sub>c,i</sub> = Density of coating, i, kg coating per liter coating.

W<sub>c,i</sub> = Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used during the month.

(b). Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j})$$
 (Eq. 1B)

Where: B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

 $Vol_{t,j}$  = Total volume of thinner and/or other additive, j, used during the month,

 $D_{t,j}$  = Density of thinner and/or other additive, j, kg per liter.

W<sub>t,j</sub> = Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used during the month.

(c). Calculate the kg of organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} (Vol_{s,k})(D_{s,k})(W_{s,k})$$
 (Eq. 1C)

Where: C = Total mass of organic HAP in the cleaning materials used during the month, kg.

 $Vol_{s,k}$  = Total volume of cleaning material, k, used during the month, liters.

 $D_{s,k}$  = Density of cleaning material, k, kg per liter.

W<sub>s,k</sub> = Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

- (d). If the Permittee chooses to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then he shall determine the mass according to the procedures in 40 CFR 63.4551 (e)(4).
- 6. Calculate the total mass of coating solids used. Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^{m} (Vol_{c,i}) (D_{c,i}) (M_{s,i})$$
 (Eq. 2)

Where: Mst = Total mass of coating solids used during the month, kg.

Volc, i = Total volume of coating, i, used during the month, liters.

Dc,i = Density of coating, i, kgs per liter coating, determined according to Section 2.2 D.1.d.ii.B.3 above

Ms,i = Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to Section 2.2 D.1.d.i.B.2 above

m = Number of coatings used during the month.

7. <u>Calculate the organic HAP emission rate</u>. Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{n} H_{e}}{\sum_{y=1}^{n} M_{st}}$$
 (Eq. 3)

Where: Hyr = Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

He = Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

Mst = Total mass of coating solids used during month, y, kg, as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

- 8. Compliance demonstration. The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the emission limit in Section 2.2 D.1.b. above. The Permittee shall keep all records as required by Section 2.2 D.1.g below. As part of the notification of compliance status required by Section 2.2 D.1.f below, the Permittee shall identify the coating operation(s) for which he used the emission rate without addon controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in Section 2.2 D.1.b. above, determined according to the procedures in this section.
- C. 1. To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to Section 2.2 D.1.c.ii.B.1 through 7 above, must be less than or equal to the applicable emission limit in Section 2.2 D.1.b. above. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in Section 2.2 D.1.c.ii.A above is the end of a compliance period consisting of that month and the preceding 11 months. The Permittee shall perform the calculations in Section 2.2 D.1.c.ii.B.1 through 7 above on a monthly basis using data from the previous 12 months of operation.
  - 2. If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in Section 2.2 D.1.b. above, this is a deviation from the emission limitation for that compliance period and must be reported as specified in Sections 2.2 D.1.f.vi and 2.2 D.1.h.x below.
  - 3. As part of each semiannual compliance report required by Section 2.2 D.1.h below, the Permittee shall identify the coating operation(s) for which he used the emission rate without add-on controls option. If there were no deviations from the emission limitations, the Permittee shall submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than

- or equal to the applicable emission limit in Section 2.2 D.1.b. above, determined according to Section 2.2 D.1.c.ii.B.1 through 7 above.
- 4. The Permittee shall maintain records as specified in Section 2.2 D.1.g below.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if it does not conduct a monthly compliance demonstration as required above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.2 D.1.b. above.

#### Operating Limits/Work Practice Standards [63.4492 and 63.4493]

d. For the above existing sources on which the Permittee uses the compliant material option in Section 2.2 D.1.c.i above or the emission rate without add-on controls option in Section 2.2 D.1.c.ii above, the Permittee is not required to meet any operating limits or work practice standards.

#### **Notifications** [63.4510]

- e. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in Section 2.2 D.1.f below.
- f. The Permittee shall submit the notification of compliance status required by 40 CFR § 63.9(h) no later than 30 calendar days following the end of the initial compliance period described in 40 CFR § 63.4540, 40 CFR § 63.4550, or 40 CFR § 63.4560 that applies The notification of compliance status must contain the following information and the information in 63.9(h).
  - i. Company name and address;
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
  - iii. Date of the report and beginning and ending dates of the reporting period;
  - iv. Identification of the compliance option or options specified in Section 2.2 D.1.c above that you used on each coating operation during the initial compliance period;
  - v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period;
  - vi. If the Permittee had a deviation, include the following information:
    - A. A description and statement of the cause of the deviation; and
    - B. If the Permittee failed to meet the applicable emission limit in Section 2.2 D.1.b. above, include all the calculations used to determine the kg (lb) of organic HAP emitted per kg (lb) coating solids used. The Permittee does not need to submit information provided by the materials' suppliers or manufacturers, or test reports;
  - vii. For each of the following data items that are required by the compliance option(s) the Permittee used to demonstrate compliance with the emission limit, an example of how the Permittee determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to Sections 2.2 D.1.c.i.B.1, 2 or 3 above. The Permittee does not need to submit copies of any test reports.
    - A. Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material;
    - B. Mass fraction of coating solids for one coating;
    - C. Density for one coating, one thinner and/or other additive, and one cleaning material, except that if the Permittee uses the compliant material option, only the example coating density is required; and
    - D. The amount of waste materials and the mass of organic HAP contained in the waste materials for which the Permittee is claiming an allowance in Equation 1 of Section 2.2 D.1.c.ii.B.5 above;
  - viii. The calculation of kg (lb) of organic HAP emitted per kg (lb) coating solids used for the compliance option(s) the Permittee used, as specified below:
    - A. For the compliant material option, an example calculation of the organic HAP content for one coating, using Equation 1 of Section 2.2 D.1.c.i.B.3 above; and
    - B. For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Sections 2.2 D.1.c.ii.B.5 through 7 above;

#### Recordkeeping [63.4530]

- g. The Permittee shall collect and keep records of the data and information specified below. Failure to collect and keep these records is a deviation from the applicable standard.
  - i. A copy of each notification and report submitted to comply with this subpart, and the documentation supporting each notification and report;
  - ii. A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If the Permittee conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, he shall keep a copy of the complete test report. If the Permittee uses information provided by the manufacturer or supplier of the material that was based on testing, he shall keep the summary sheet of results provided by the manufacturer or supplier. The Permittee is not required to obtain the test report or other supporting documentation from the manufacturer or supplier;
  - iii. For each compliance period, the records specified below:
    - A. A record of the coating operations on which the Permittee used each compliance option and the time periods (beginning and ending dates and times) for each option;
    - B. For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of Section 2.2 D.1.c.i.B.3 above; and
    - C. For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of Sections 2.2 D.1.c.ii.B.5 through 7 above; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.2 D.1.c.ii.B.5.(d) above; the calculation of the total mass of coating solids used each month using Equation 2 of Section 2.2 D.1.c.ii.B.6 above; and the calculation of each 12-month organic HAP emission rate using Equation 3 of Section 2.2 D.1.c.ii.B.7 above.
  - iv. A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If the Permittee is using the compliant material option for all coatings at the source, he may maintain purchase records for each material used rather than a record of the mass used;
  - v. A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period;
  - vi. A record of the mass fraction of coating solids for each coating used during each compliance period;
  - vii. If the Permittee uses an allowance in Equation 1 of Section 2.2 D.1.c.ii.B.5 above for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF), he shall keep records in accordance with 40 CFR 63.4350(g).

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the above records are not maintained.

#### **Reporting** [63.4520]

- h. The Permittee shall submit a summary report of the monitoring and recordkeeping activities postmarked on or before January 30 of each calendar year for the preceding six-month period between July and December and July 30 of each calendar year for the preceding six-month period between January and June. All instances of deviations from the requirements of this permit must be clearly identified. The report shall contain the following information:
  - i. Company name and address;
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report
  - iii. Date of report and beginning and ending dates of the reporting period;
  - iv. Identification of the compliance option or options specified in Section 2.2 D.1.c above that you used on each coating operation during the reporting period. If the Permittee switched between compliance options during the reporting period, he shall report the beginning and ending dates for each option used;
  - v. If the Permittee used the emission rate without add-on controls compliance option (Section 2.2 D.1.c.ii above), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period
  - viii. If there were no deviations from the emission limitations in Section 2.2 D.1.b. above that apply, a statement that there were no deviations from the emission limitations during the reporting period

- ix. If the Permittee used the compliant material option and there was a deviation from the applicable organic HAP content requirements in Section 2.2 D.1.b. above, the following information:
  - A. Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used;
  - B. The calculation of the organic HAP content (using Equation 1 of Section 2.2 D.1.c.i.B.3 above) for each coating identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by coating suppliers or manufacturers, or test reports);
  - C. The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified above. The Permittee does not need to submit background data supporting this calculation (e.g., information provided by material suppliers or manufacturers, or test reports); and
  - D A statement of the cause of each deviation; and
- x. If the Permittee used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in Section 2.2 D.1.b. above, the following information:
  - A. The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in Section 2.2 D.1.b. above;
  - B. The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. The Permittee shall submit the calculations for Equations 1, 1A through 1C, 2, and 3 of Sections 2.2 D.1.c.ii.B.5 through 7 above; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to Section 2.2 D.1.c.ii.B.5 above. The Permittee does not need to submit background data supporting these calculations (e.g., information provided by materials suppliers or manufacturers, or test reports); and
  - C. A statement of the cause of each deviation.

#### 2. 15A NCAC 2D .1111, Maximum Achievable Control Technology-40 CFR 63, Subpart MMMM

a. The Permittee shall comply with all applicable provisions contained in Environmental Management Commission Standard 15A NCAC 2D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR 63, Subpart MMMM, "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products", for the above existing affected sources.

#### Emission Limits [63.3890]

b. For each existing general use coating affected source, the Permittee shall limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

#### Compliance Options [40 CFR 63.3891]

c. As of the compliance date stated in section 2.2.D.2.a, the Permittee shall demonstrate compliance with 40 CFR 63, Subpart MMMM by demonstrating compliance with 40 CFR 63, Subpart PPPP as detailed in Section 2.2.D.1 above.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if it does not conduct a monthly compliance demonstration as required by Section 2.2.D.1.c above or if the compliance demonstration shows an exceedance of the emission limitations in Section 2.2 D.1.b. above.

#### **Notifications** [63.3910]

- d. The Permittee shall submit the notifications in 63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in Section 2.2.D.2.e below.
- e. The Permittee shall submit the notification of compliance status required by 63.9(h. The notification of compliance status must contain the following information and the information in 63.9(h).
  - i. Company name and address;
  - ii. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report;
  - iii. Date of the report and beginning and ending dates of the reporting period;
  - iv. Identification of the compliance option or options specified in Section 2.2.D.1.c above that you used on each coating operation during the initial compliance period;

- v. Statement of whether or not the affected source achieved the emission limitations for the initial compliance period:
- vi. If the Permittee had a deviation, include the following information:
  - A. A description and statement of the cause of the deviation; and
  - B. If the Permittee failed to meet the applicable emission limit in Section 2.2.D.1.b above, include all the calculations used to determine the kg (lb) of organic HAP emitted per kg (lb) coating solids used. The Permittee does not need to submit information provided by the materials' suppliers or manufacturers, or test reports;
- vii. For each of the following data items that are required by the compliance option(s) the Permittee used to demonstrate compliance with the emission limit, an example of how the Permittee determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to Sections 2.2.D.1.c.i.B.1, 2 or 3 above. The Permittee does not need to submit copies of any test reports.
  - A. Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one c cleaning material;
  - B. Mass fraction of coating solids for one coating;
  - C. Density for one coating, one thinner and/or other additive, and one cleaning material, except that if the Permittee uses the compliant material option, only the example coating density is required; and
  - D. The amount of waste materials and the mass of organic HAP contained in the waste materials for which the Permittee is claiming an allowance in Equation 1 of Section 2.2.D.1.c.ii.B.5 above;
- viii. The calculation of kg (lb) of organic HAP emitted per kg (lb) coating solids used for the compliance option(s) the Permittee used, as specified below:
  - A. For the compliant material option, an example calculation of the organic HAP content for one coating, using Equation 1 of Section 2.2.D.1.c.i.B.3 above; and
  - B. For the emission rate without add-on controls option, the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of Sections 2.2.D.1.c.ii.B.5 through 7 above.

#### Recordkeeping [63.3930]

f. The Permittee shall collect and keep records of the data and information as specified in Section 2.2.D.1.g above.

The Permittee shall be deemed in noncompliance with 15A NCAC 2D .1111 if the records are not maintained as required by Section 2.2.D.1.g above.

#### **Reporting** [63.3920]

g. The Permittee shall submit report as specified in Section 2.2.D.1.h above.

#### 2.3- Actuals PAL Permit Requirements

#### $\forall$ A. VOC emissions limits

- a. The Actuals Plantwide Applicability Limitations (Actuals PAL) of **750.6 per year of VOC** emissions Per Rolling 12-Months period shall not be exceeded from the following **PAL Emissions Units**:
  - i) Combustion Sources:
    - (1) Two natural gas/propane/No.2 fuel oil fired boilers (33.6 MMBtu/hr maximum heat input each, ES-BLR-02 and ES-BLR-05);
    - (2) One natural gas fired boiler (5.5 MMBtu/hr maximum heat input, ES-ECoat-Boiler);
    - (3) Two propane vaporizers (1.44 and 0.833 MMBTU/hr maximum heat input, respectively, IES-9):
    - (4) Miscellaneous combustion sources (IES-7);
    - (5) Emergency fire pumps with diesel fired engines with ratings of 182, 240 and 240 hp, respectively (ID Nos. IESFP1 through IESFP3); and
    - (6) Natural gas fired emergency generator (131.4 HP capacity, IES-GEN)
  - ii) Spray Coating and Assembly Operation (ES-SCAO) consisting of:
    - (1) Fifteen paint spray booths (ES-Chassis, ES-Seamseal Paint Booth, ES-Shipping Paint Booth, ES-Prep Lane, ES-Ecoat, ES-Offline 1, ES-Offline 2, ES-Offline Combo, ES-CRC Booth, ES-Wheel Booth, ES-Topcoat Booth 3, ES-Topcoat Booth 2, ES-Topcoat Booth 4, ES-Topcoat Booth 1, and ES-Pit Exhaust);
    - (2) Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2);
    - (3) One flash off area (ES-Flashoff Area);
    - (4) Three sanding booths (ES-Hood Prep, ES-Stripe, and ES-Blowoff Booth);
    - (5) One ECoat operations (ES-ECoat), consisting of the following equipment:
      - Two 12,000 gallon RO Storage tanks;
      - Two 12,000 gallon RO rinse tanks;
      - One 22,000 gallon E-coat tank;
      - Two 11,000 gallon E-coat transfer tanks;
      - One 12,000 gallon permeate waste transfer tank and
      - One 6,000 gallon fresh resin storage tank;
    - (6) Various operations including gluing, caulking, seamseal, solvent wipe, cleanup solvent and other non-coating sources of VOC (ES-1);
    - (7) One paint mix room/storage area (ES-PMR1) and
    - (8) One paint mix room/storage area (ES-PMR2)
  - iii) Various Storage Tanks consisting of:
    - (1) Two10,000 gallon antifreeze tanks (IES-1 and IES-14);
    - (2) Two 10,000 gallon diesel fuel tanks (IES-2 and IES-3); and
    - (3) Three 10,000 gallon purge solvent tanks (Existing IES-4, IES-5, and IES-6.
  - iv) Other Sources:
    - (1) One distillation unit with exhaust (IES-8);
    - (2) Multiple Parts Washers (IES-11); and
    - (3) Two dynamometers (IES-12).

#### **Effective and Expiration Date**

- v). The Effective Date for this PAL shall be on XXX xx, 2017 (Permit issue date);
- vi). The Expiration Date for this PAL shall be on **XXX xx, 2027** (10 years after permit issue date); The Permittee may make modifications or additions to the PAL emissions units in Section 2.3 A. a., above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified in Section 2.3

<sup>&</sup>lt;sup>∀</sup> In the event Gaston County is designated as attainment, this VOC PAL also satisfies the VOC PAL provisions under 15A NCAC 02D .0530 (PSD) and 40 CFR § 51.166(w).

- A. h., through o., below and the plant wide actual VOC emissions will remain less than 750.6 tons per rolling 12 months.
- b. If the Permittee applies to renew the PAL permit in accordance with 40 CFR §51.165(f)(10) before the end of the PAL effective period in Section 2.3. A. vi)., above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR §51.165(f)(10) and 40 CFR §51.165(f)(7)(iii)]
- c. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR §51.165(f)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR §51.165(f)(7)(v) and 40 CFR §51.165(f)(9)]

#### **Testing** [15A NCAC 2Q .0508(f)]

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing indicate that the VOC emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.3. A. a., above, the Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531.
- e. If any emission factors included in this Section 2.3., are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR §51.165(f)(12)(ix)]

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- f. The Permittee shall record on a daily basis all VOC containing materials used in the Spray-Coating and Assembly Operations. The coating usage, coating waste percentages and usage of cleanup solvent, caulk, glues, seam seals and any other non- coating sources of VOCs shall be monitored and recorded daily. The Permittee shall be in violation with the New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .531 if the above records are not maintained.
- g. The Permittee shall record monthly the natural gas, propane, No.2 fuel, and diesel oil burned in the two natural gas/propane/No.2 fuel oil fired boilers (ID Nos. ES-BLR-02 and ES-BLR-05); one natural gas boiler (ES-ECoat-Boiler); two propane vaporizers (IES-9); the gas-fired paint drying ovens; and the miscellaneous combustion sources (IES-7). The Permittee shall record the monthly hours of operation of the fire pumps (IESFP1, IESFP2, and IESFP3) and the natural gas generator (IES-GEN). The Permittee shall be deemed in violation with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0531 if the above required information is not recorded.
- h. The Permittee shall calculate the monthly VOC emissions from the Spray-Coating and Assembly Operations determined by a mass balance assuming all VOC-containing purchased materials in a month, minus the amount collected in waste drums, are used that month. This is calculated by multiplying VOC-containing materials usage by their VOC content. Purge solvent emissions shall be calculated based on a material balance of the amount purchased compared to the monthly beginning and monthly ending inventories.

  [40 CFR \$51.165(f)(12)(ii)(a)]
- i. The Permittee shall calculate the monthly VOC emissions as a result of fuel combustion from the two natural gas/propane/No.2 fuel oil fired boilers (ID Nos. ES-BLR-02 and ES-BLR-05); one natural gas fired boiler (ES-ECoat-Boiler); two propane fired vaporizers (IES-9); the gas-fired paint drying ovens; and the miscellaneous combustion sources (IES-7) by calculating the monthly emissions as follows: (natural gas)

VOC emissions (tons/month) =  $(5.5 \text{ lb}/10^6 \text{ scf x C scf/month})/2000 \text{ lbs/ton}$  Where,

C = natural gas usage in standard cubic feet per month. (propane)

VOC emissions (tons/month) = (0.8 lb/103 gal x C gallons /month)/2000 lbs/ton

C = propane usage in gallons per month.

(No. 2 fuel oil)

VOC emissions (tons/month) = (0.2 lb/103 gal x C gallons /month)/2000 lbs/ton Where,

C = No. 2 fuel oil usage in gallons per month.

(diesel fuel)

The Permittee shall use the latest emissions factors in determining the monthly VOC emissions from the combustion of diesel fuel at the combustion sources listed in Section 2.3 A. a. i., above.

[40 CFR §51.165(f)(12)(vi)]

j. The Permittee shall calculate the monthly VOC emissions as a result of fuel combustion from the diesel fired engines for the fire pumps (ID Nos. IESFP1, IESFP2, and IESFP3) by calculating the emissions as follows:

VOC emissions (tons/month) from IESFP1 = (0.450 lb/hr x X hours /month)/2000 lbs/ton

Where,

X = hours of operation of IESFP1 per month

VOC emissions (tons/month) from IESFP2 = (0.593 lb/hr x Y hours /month)/2000 lbs/ton

Y =hours of operation of IESFP2 per month

VOC emissions (tons/month) from IESFP3 = (0.593 lb/hr x Z hours /month)/2000 lbs/ton Where,

Z = hours of operation of IESFP3 per month

[40 CFR §51.165(f)(12)(vi)]

k. The Permittee shall calculate the monthly VOC emissions as a result of fuel combustion from the natural gas fired emergency generator (ID No. IES-GEN) by calculating the emissions as follows:

 $VOC\ emissions\ (tons/month) = (0.0422\ lb/hr\ x\ D\ hours\ /month)/2000\ lbs/ton$ 

Where.

D = hours of operation of IES-GEN per month

[40 CFR §51.165(f)(12)(vi)]

- 1. The Permittee shall use the material balance approach in Section 2.3 A. h., above to calculate emissions of the three 10,000 gallon purge solvent tanks (IES-4, IES-5, and IES-6).
- m. The Permittee shall use an estimate of 0.1 tons per rolling 12 month period (0.0083 tons per calendar month) for the following storage tanks combined:
  - (1) One 10,000 gallon antifreeze tank (IES-1);
  - (2) Two 10,000 gallon diesel fuel tanks (IES-2 and IES-3); and
  - (3) One 10,000 gallon antifreeze tank (IES-14)
- n. The Permittee shall use an estimate of 1.0 tons per rolling 12 month period (0.083 tons per calendar month) for the multiple pasts washers (IES-11) combined.
- o. The Permittee shall use an estimate of 0.2 tons per rolling 12 month period (0.017 tons per calendar month) for the two dynamometers (IES-12) combined.
- p. The Permittee shall determine facility wide VOC emissions per month using the emissions calculations in Section 2.3 A. h., through o., above. Calculations and the total amount of facility wide VOC emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in violation with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0531 if the 12-month rolling facility wide VOC emissions exceed the limit in Section 2.3 A. a., above or the facility wide VOC emissions are not recorded.
- q. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR §51.165(f) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0531, if these records are not maintained.

[40 CFR §51.165(f)(7)(viii) and 40 CFR §51.165(f)(13)(i)]

- r. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
  - i. A copy of the PAL permit application and any applications for revisions to the PAL; and

ii. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in this Section 2.3.

The records may be retained in electronic format. The Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0531, if these records are not maintained.

[40 CFR §51.165(f)(7)(viii) and 40 CFR §51.165(f)(13)(i)]

#### Reporting [15A NCAC 2Q .0508(f), and 40 CFR §51.165(f)(7)(ix) and 40 CFR §51.165(f)(14)]

- s. The Permittee shall submit semi-annual monitoring reports to DAQ in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR \$51.165(f)(14)(i) through (iii).
- t. The Permittee shall submit semi-annual report. The semi-annual report shall be submitted to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding sixmonth period between July and December, and July 30 of each calendar year for the preceding sixmonth period between January and June. This report shall contain the information required in paragraphs 40 CFR §51.165(f)(14)(i)(a) through (g).
  - (A) The identification of Permittee and the permit number.
  - (B) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR §51.165 (f)(13)(i).
  - (C) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
  - (D) A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
  - (E) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
  - (F) A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR §51.165(f) (12)(vii).
  - (G) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report. [40 CFR §51.166(w)(14)]

#### **<u>Data Validation</u>** [40 CFR §51.165(f)(12)(ix)]

- u. The Permittee shall revalidate the emission factors and any other data used in Section 2.3. A. h., through k., above, for calculations of VOC emissions through performance testing or other scientifically valid means approved by the DAQ.
- v. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit.
- w. The Permittee shall submit a report to the DAQ regional supervisor providing data re-validation consistent with provision outlined in 40 CFR §51.165(f)(12)(ix).

If the Permittee does not perform this revalidation, or fails to submit a report to the DAQ regional supervisor providing data re-validation within five years after the issuance of the PAL permit, the Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0531.

#### $^{\gamma}B.$ NO<sub>x</sub> emissions limits

- a. The Actuals Plantwide Applicability Limitations (Actuals PAL) of **56.4 per year of NO**<sub>x</sub> emissions Per Rolling 12-Months period shall not be exceeded from the following **PAL Emissions Units**:
  - i) Combustion Sources:

<sup>&</sup>lt;sup>T</sup> In the event Gaston County is designated as attainment, this NO<sub>x</sub> PAL also satisfies the NO<sub>x</sub> PAL provisions under 15A NCAC 02D .0530 (PSD) and 40 CFR § 51.166(w).

- (1) Two natural gas/propane/No.2 fuel oil fired boilers (33.6 MMBtu/hr maximum heat input each, ES-BLR-02 and ES-BLR-05):
- (2) One natural gas fired boiler (5.5 MMBtu/hr maximum heat input, ES-ECoat-Boiler);
- (3) Two propane vaporizers (1.44 and 0.833 MMBTU/hr maximum heat input, respectively, IES-9);
- (4) Miscellaneous combustion sources (IES-7);
- (5) Emergency fire pumps with diesel fired engines with ratings of 182, 240 and 240 hp, respectively (ID Nos. IESFP1 through IESFP3);
- (6) Natural gas fired emergency generator (131.4 HP capacity, IES-GEN);
- (7) Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2); and
- (8) Two dynamometers (IES-12)

#### **Effective and Expiration Date**

- ii). The Effective Date for this PAL shall be on April 1, 2013;
- iii). The Expiration Date for this PAL shall be on March 31, 2023;
- iv). The plant wide actual VOC emissions will remain less than 750.6 tons per rolling 12 months<sup>2</sup>. The Permittee may make modifications or additions to the PAL emissions units in Section 2.3 B. a., above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified in Section 2.3 B. g. and h., below.
- b. If the Permittee applies to renew the PAL permit in accordance with 40 CFR §51.165(f)(10) before the end of the PAL effective period in Section 2.3. B. a., above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR §51.165(f)(7)(iii)]
- c. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR §51.165(f)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR §51.165(f)(7)(v)]

#### **Testing** [15A NCAC 2Q .0508(f)]

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing indicate that the  $NO_x$  emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.3. B. a., above, the Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531.
- e. If any emission factors included in this Section 2.3., are revised, the applicable provision of the PAL permit may be modified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR §51.166(w)(12)(ix) and 40 CFR §51.165(f)(12)(ix)]

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- f. The Permittee shall record the monthly natural gas, propane, No.2 fuel oil, and diesel usage from the external combustion sources and the monthly hours of operation of the fire pumps and emergency generator listed in Section 2.3 B. a. i., above. The Permittee shall be deemed in violation with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531 if the above information is not recorded.
- g. The Permittee shall calculate the monthly NOx emissions from the Combustion Sources listed in Section 2.3 B. a. i., above using the latest AP-42 emission factors.
   [40 CFR §51.166(w)(12)(vi)]
- h. The Permittee shall use an estimate of 0.8 tons per rolling 12 month period (0.067 tons per calendar month)

<sup>&</sup>lt;sup>2</sup> VOC limit under NO<sub>x</sub> PAL limit was in lieu of a production limit during the VOC BACT application (3600153.15B)

for the two dynamometers (IES-12) combined.

- i. The Permittee shall determine facility wide  $NO_x$  emissions per month using the emissions calculations in Section 2.3 B. g. and h., above. Calculations and the total amount of facility wide  $NO_x$  emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in violation with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531 if the 12-month rolling facility wide  $NO_x$  emissions exceed the limit in Section 2.3 B. a., above or the facility wide  $NO_x$  emissions are not recorded.
- j. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR §51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531, if these records are not maintained. [40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(i)]
- k. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
  - i. A copy of the PAL permit application and any applications for revisions to the PAL; and
  - ii. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in this Section 2.3.

The records may be retained in electronic format. The Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531, if these records are not maintained.

[40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(ii)]

#### Reporting [15A NCAC 2Q .0508(f), and 40 CFR §51.166(w)(7)(ix) and 40 CFR §51.166(w)(14)]

- The Permittee shall submit semi-annual monitoring reports to DAQ in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR §51.166(w)(14)(i) through (iii).
- m. The Permittee shall submit semi-annual report. The semi-annual report shall be submitted to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding sixmonth period between July and December, and July 30 of each calendar year for the preceding sixmonth period between January and June. This report shall contain the information required in paragraphs 40 CFR §51.166(w)(14)(i)(a) through (g).
  - (A) The identification of Permittee and the permit number.
  - (B) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR §51.166(w)(13)(i).
  - (C) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
  - (D) A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
  - (E) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
  - (F) A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of the pollutant or the number determined by method included in the permit, as provided by 40 CFR §51.166(w) (12)(vii).
  - (G) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

#### **<u>Data Validation</u>** [40 CFR §51.166(w)(12)(ix) and 40 CFR §51.165(f)(12)(ix)]

n. The Permittee shall revalidate the emission factors and any other data used in Section 2.3. B.g., above for calculations of NO<sub>x</sub> emissions through performance testing or other scientifically valid means approved by the DAQ.

- o. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit.
- p. The Permittee shall submit a report to the DAQ regional supervisor providing data re-validation consistent with provision outlined in 40 CFR §51.166(w)(12)(ix) and 40 CFR §51.165(f)(12)(ix).

If the Permittee does not perform this revalidation, or fails to submit a report to the DAQ regional supervisor providing data re-validation within five years after the issuance of the PAL permit, the Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 and/or 15A NCAC 2D .0531.

#### C. Green House Gas (GHG) Emissions limits

- a. The Actuals Plantwide Applicability Limitations (Actuals PAL) of 93,463 CO<sub>2</sub> equivalent (CO<sub>2e</sub> GHG) tons per rolling 12-months period shall not be exceeded from the following **PAL Emissions Units**:
  - i) Combustion Sources:
    - (1) Two natural gas/propane/No.2 fuel oil fired boilers (33.6 MMBtu/hr maximum heat input each, ES-BLR-02 and ES-BLR-05);
    - (2) One natural gas fired boiler (5.5 MMBtu/hr maximum heat input, ES-ECoat-Boiler);
    - (3) Two propane vaporizers (1.44 and 0.833 MMBTU/hr maximum heat input, respectively, IES-9);
    - (4) Miscellaneous combustion sources (IES-7);
    - (5) Emergency fire pumps with diesel fired engines with ratings of 182, 240 and 240 hp, respectively (ID Nos. IESFP1 through IESFP3);
    - (6) Natural gas fired emergency generator (131.4 HP capacity, IES-GEN);
    - (7) Five paint drying ovens (ES-Chassis Paint Drying Oven, ES-Seamseal Paint Drying Oven, ES-Ecoat Oven, ES-Topcoat Oven 1, and ES-Topcoat Oven 2); and
    - (8) Two dynamometers (IES-12).

#### **Effective and Expiration Date**

- ii). The Effective Date for this PAL shall be on April 1, 2013;
- iii). The Expiration Date for this PAL shall be on March 31, 2023;

The Permittee may make modifications or additions to the PAL emissions units in Section 2.3 C., above, without requiring a modification to the PAL provisions of this permit if the emissions from the modified or additional emissions units will be calculated according to the monitoring methods specified in Section 2.3 C. g., and h., below and the plant wide actual  $CO_2e$  emissions will remain less than 93,463 tons per rolling 12 months.

- b. If the Permittee applies to renew the PAL permit in accordance with 40 CFR §51.166(w)(10) before the end of the PAL effective period in Section 2.3. C. a., above, then the PAL permit shall not expire at the end of the PAL effective period. It shall remain in effect until a revised PAL permit is issued by the DAQ. [40 CFR §51.166(w)(7)(iii)]
- c. Once the PAL permit expires, the Permittee is subject to the requirements in 40 CFR §51.166(w)(9). Upon PAL permit expiration, the DAQ shall decide whether and how the PAL allowable emissions will be distributed and issue a revised permit incorporating allowable limits for each PAL emissions unit, as the DAQ determines is appropriate. The DAQ will retain the ultimate discretion to decide whether and how the allowable emissions will be allocated. [40 CFR §51.166(w)(7)(v)]

#### **Testing** [15A NCAC 2Q .0508(f)]

- d. If emissions testing is required, the testing shall be performed in accordance with General Condition JJ. If the results of this testing indicate that the CO<sub>2</sub>e emissions on a 12-month rolling basis have exceeded the actual PAL in Section 2.3. C. a., above, the Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530.
- e. If any emission factors included in this Section 2.3 C. g., are revised, the applicable provision of the PAL permit may be mo<sub>d</sub>ified through a modification to the permit to reflect the results of a revalidation. The Permittee shall not rely on the updated emission factors until they are approved by DAQ and incorporated into the permit. [40 CFR §51.166(w)(12)(ix)]

#### Monitoring/Recordkeeping [15A NCAC 02Q .0508(f)]

- f. The Permittee shall record the monthly natural gas, propane, No.2 fuel oil, and diesel usage from the external combustion sources and the monthly hours of operation of the fire pumps and emergency generator listed in Section 2.3 C. a. i., above.
- g. The Permittee shall calculate the monthly CO<sub>2e</sub> emissions from the Combustion Sources listed in Section 2.3 C. a. i., above, using the latest AP-42, or Part 98 emissions factors.
  [40 CFR §51.166(w)(12)(vi)]
- h. The Permittee shall use an estimate of 2,225 tons per rolling 12 month period (185.4 tons per calendar month) for the two dynamometers (IES-12) combined.
- i. The Permittee shall determine facility wide CO<sub>2e</sub> emissions per month using the emissions calculations in Section 2.3 C. g. and h., above. Calculations and the total amount of facility wide CO<sub>2e</sub> emissions shall be recorded monthly in a logbook (written or electronic format). The Permittee shall be deemed in violation with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530 if the 12-month rolling facility wide CO<sub>2e</sub> emissions exceed the limit in Section 2.3 C. a., above or the facility wide CO<sub>2e</sub> emissions are not recorded.
- j. The Permittee shall retain on site a copy of all records necessary to determine compliance with any requirement in 40 CFR §51.166(w) and of the PAL, including a determination of each PAL emissions unit's 12-month rolling total emissions, for 5 years from the date of such record. The records may be retained in electronic format. The Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530, if these records are not maintained. [40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(i)]
- k. The Permittee shall retain a copy of the following records, for the duration of the PAL effective period plus 5 years:
  - i. A copy of the PAL permit application and any applications for revisions to the PAL; and
  - ii. Each annual certification of compliance pursuant to Title V and the data relied on in certifying the compliance. This requirement applies only to the data used to certify compliance with the terms of the actuals PAL permit in this Section 2.3.

The records may be retained in electronic format. The Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530, if these records are not maintained.

[40 CFR §51.166(w)(7)(viii) and 40 CFR §51.166(w)(13)(ii)]

#### Reporting [15A NCAC 2Q .0508(f), and 40 CFR §51.166(w)(7)(ix) and 40 CFR §51.166(w)(14)]

- The Permittee shall submit semi-annual monitoring reports to DAQ in accordance with the applicable Title V operating permit program. The reports shall meet the requirements in paragraphs 40 CFR §51.166(w)(14)(i) through (iii).
- m. The Permittee shall submit semi-annual report. The semi-annual report shall be submitted to the Regional Air Quality Supervisor postmarked on or before January 30 of each calendar year for the preceding sixmonth period between July and December, and July 30 of each calendar year for the preceding sixmonth period between January and June. This report shall contain the information required in paragraphs 40 CFR §51.166(w)(14)(i)(a) through (g).
  - (A) The identification of Permittee and the permit number.
  - (B) Total annual emissions (tons/year) based on a 12-month rolling total for each month in the reporting period recorded pursuant to paragraph 40 CFR §51.166 (w)(13)(i).
  - (C) All data relied upon, including, but not limited to, any Quality Assurance or Quality Control data, in calculating the monthly and annual PAL pollutant emissions.
  - (D) A list of any PAL emissions units modified or added to the major stationary source during the preceding 6-month period.
  - (E) The number, duration, and cause of any deviations or monitoring malfunctions (other than the time associated with zero and span calibration checks), and any corrective action taken.
  - (F) A notification of a shutdown of any PAL permit monitoring system, whether the shutdown was permanent or temporary, the reason for the shutdown, the anticipated date that the monitoring system will be fully operational or replaced with another monitoring system, and whether the PAL emissions unit monitored by the monitoring system continued to operate, and the calculation of the emissions of

- the pollutant or the number determined by method included in the permit, as provided by 40 CFR \$51.166(w) (12)(vii).
- (G) A signed statement by the responsible official (as defined by the applicable Title V operating permit program) certifying the truth, accuracy, and completeness of the information provided in the report.

## **<u>Data Validation</u>** [40 CFR §51.166(w)(12)(ix)]

- n. The Permittee shall revalidate the emission factors and any other data used in Section 2.3. C. g., above for calculations of GHG emissions through performance testing or other scientifically valid means approved by the DAQ.
- o. The Permittee shall perform such revalidation once every five years after the issuance of the PAL permit.
- p. The Permittee shall submit a report to the DAQ regional supervisor providing data re-validation consistent with provision outlined in 40 CFR §51.166(w)(12)(ix).

If the Permittee does not perform this revalidation, or fails to submit a report to the DAQ regional supervisor providing data re-validation within five years after the issuance of the PAL permit, the Permittee shall be deemed in violations with New Source Review (NSR) requirements and in noncompliance with 15A NCAC 2D .0530.

# **SECTION 3 - GENERAL CONDITIONS (version 5.1, 08/03/2017)**

This section describes terms and conditions applicable to this Title V facility.

## A. General Provisions [NCGS 143-215 and 15A NCAC 02Q .0508(i)(16)]

- Terms not otherwise defined in this permit shall have the meaning assigned to such terms as defined in 15A NCAC 02D and 02Q.
- 2. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are binding and enforceable pursuant to NCGS 143-215.114A and 143-215.114B, including assessment of civil and/or criminal penalties. Any unauthorized deviation from the conditions of this permit may constitute grounds for revocation and/or enforcement action by the DAQ.
- 3. This permit is not a waiver of or approval of any other Department permits that may be required for other aspects of the facility which are not addressed in this permit.
- 4. This permit does not relieve the Permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted facility, or from penalties therefore, nor does it allow the Permittee to cause pollution in contravention of state laws or rules, unless specifically authorized by an order from the North Carolina Environmental Management Commission.
- 5. Except as identified as state-only requirements in this permit, all terms and conditions contained herein shall be enforceable by the DAQ, the EPA, and citizens of the United States as defined in the Federal Clean Air Act.
- 6. Any stationary source of air pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the DAQ, unless the source is exempted by rule. The DAQ may issue a permit only after it receives reasonable assurance that the installation will not cause air pollution in violation of any of the applicable requirements. A permitted installation may only be operated, maintained, constructed, expanded, or modified in a manner that is consistent with the terms of this permit.

## B. **Permit Availability** [15A NCAC 02Q .0507(k) and .0508(i)(9)(B)]

The Permittee shall have available at the facility a copy of this permit and shall retain for the duration of the permit term one complete copy of the application and any information submitted in support of the application package. The permit and application shall be made available to an authorized representative of Department of Environmental Quality upon request.

# C. Severability Clause [15A NCAC 02Q .0508(i)(2)]

In the event of an administrative challenge to a final and binding permit in which a condition is held to be invalid, the provisions in this permit are severable so that all requirements contained in the permit, except those held to be invalid, shall remain valid and must be complied with.

#### D. **Submissions** [15A NCAC 02O .0507(e) and 02O .0508(i)(16)]

Except as otherwise specified herein, two copies of all documents, reports, test data, monitoring data, notifications, request for renewal, and any other information required by this permit shall be submitted to the appropriate Regional Office. Refer to the Regional Office address on the cover page of this permit. For continuous emissions monitoring systems (CEMS) reports, continuous opacity monitoring systems (COMS) reports, quality assurance (QA)/quality control (QC) reports, acid rain CEM certification reports, and NOx budget CEM certification reports, one copy shall be sent to the appropriate Regional Office and one copy shall be sent to:

Supervisor, Stationary Source Compliance North Carolina Division of Air Quality 1641 Mail Service Center Raleigh, NC 27699-1641

All submittals shall include the facility name and Facility ID number (refer to the cover page of this permit).

#### E. **Duty to Comply** [15A NCAC 02Q .0508(i)(3)]

The Permittee shall comply with all terms, conditions, requirements, limitations and restrictions set forth in this permit. Noncompliance with any permit condition except conditions identified as state-only requirements constitutes a

violation of the Federal Clean Air Act. Noncompliance with any permit condition is grounds for enforcement action, for permit termination, revocation and reissuance, or modification, or for denial of a permit renewal application.

## F. **Circumvention** - STATE ENFORCEABLE ONLY

The facility shall be properly operated and maintained at all times in a manner that will effect an overall reduction in air pollution. Unless otherwise specified by this permit, no emission source may be operated without the concurrent operation of its associated air pollution control device(s) and appurtenances.

## **G. Permit Modifications**

- 1. Administrative Permit Amendments [15A NCAC 02Q .0514]
  - The Permittee shall submit an application for an administrative permit amendment in accordance with 15A NCAC 02Q .0514.
- 2. Transfer in Ownership or Operation and Application Submittal Content [15A NCAC 02Q .0524 and 02Q .0505] The Permittee shall submit an application for an ownership change in accordance with 15A NCAC 02Q.0524 and 02Q .0505.
- 3. Minor Permit Modifications [15A NCAC 02Q .0515]
  - The Permittee shall submit an application for a minor permit modification in accordance with 15A NCAC 02Q .0515.
- 4. Significant Permit Modifications [15A NCAC 02Q .0516]
  - The Permittee shall submit an application for a significant permit modification in accordance with 15A NCAC 02O .0516.
- 5. Reopening for Cause [15A NCAC 02Q .0517]
  - The Permittee shall submit an application for reopening for cause in accordance with 15A NCAC 02Q .0517.

## H. Changes Not Requiring Permit Modifications

1. Reporting Requirements

Any of the following that would result in new or increased emissions from the emission source(s) listed in Section 1 must be reported to the Regional Supervisor, DAQ:

- a. changes in the information submitted in the application;
- b. changes that modify equipment or processes; or
- c. changes in the quantity or quality of materials processed.

If appropriate, modifications to the permit may then be made by the DAQ to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause a violation of the emission limitations specified herein.

#### 2. Section 502(b)(10) Changes [15A NCAC 02Q .0523(a)]

- a. "Section 502(b)(10) changes" means changes that contravene an express permit term or condition. Such changes do not include changes that would violate applicable requirements or contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- b. The Permittee may make Section 502(b)(10) changes without having the permit revised if:
  - i. the changes are not a modification under Title I of the Federal Clean Air Act;
  - ii. the changes do not cause the allowable emissions under the permit to be exceeded;
  - iii. the Permittee notifies the Director and EPA with written notification at least seven days before the change is made; and
  - iv. the Permittee shall attach the notice to the relevant permit.
- c. The written notification shall include:
  - i. a description of the change;
  - ii. the date on which the change will occur;
  - iii. any change in emissions; and
  - iv. any permit term or condition that is no longer applicable as a result of the change.
- d. Section 502(b)(10) changes shall be made in the permit the next time that the permit is revised or renewed, whichever comes first.
- 3. Off Permit Changes [15A NCAC 02Q .0523(b)]

The Permittee may make changes in the operation or emissions without revising the permit if:

- a. the change affects only insignificant activities and the activities remain insignificant after the change; or
- b. the change is not covered under any applicable requirement.
- 4. Emissions Trading [15A NCAC 02Q .0523(c)]

To the extent that emissions trading is allowed under 15A NCAC 02D, including subsequently adopted maximum achievable control technology standards, emissions trading shall be allowed without permit revision pursuant to 15A NCAC 02Q .0523(c).

# I.A Reporting Requirements for Excess Emissions and Permit Deviations [15A NCAC 02D .0535(f) and 02Q .0508(f)(2)]

<u>"Excess Emissions"</u> - means an emission rate that exceeds any applicable emission limitation or standard allowed by any rule in Sections .0500, .0900, .1200, or .1400 of Subchapter 02D; or by a permit condition; or that exceeds an emission limit established in a permit issued under 15A NCAC 02Q .0700. (*Note: Definitions of excess emissions under 02D .1110 and 02D .1111 shall apply where defined by rule.*)

<u>"Deviations"</u> - for the purposes of this condition, any action or condition not in accordance with the terms and conditions of this permit including those attributable to upset conditions as well as excess emissions as defined above lasting less than four hours.

## **Excess Emissions**

- 1. If a source is required to report excess emissions under NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or the operating permit provides for periodic (e.g., quarterly) reporting of excess emissions, reporting shall be performed as prescribed therein.
- 2. If the source is not subject to NSPS (15A NCAC 02D .0524), NESHAPS (15A NCAC 02D .1110 or .1111), or these rules do NOT define "excess emissions," the Permittee shall report excess emissions in accordance with 15A NCAC 02D .0535 as follows:
  - a. Pursuant to 15A NCAC 02D .0535, if excess emissions last for more than four hours resulting from a malfunction, a breakdown of process or control equipment, or any other abnormal condition, the owner or operator shall:
    - i. notify the Regional Supervisor or Director of any such occurrence by 9:00 a.m. Eastern Time of the Division's next business day of becoming aware of the occurrence and provide:
      - name and location of the facility;
      - nature and cause of the malfunction or breakdown;
      - time when the malfunction or breakdown is first observed;
      - expected duration; and
      - estimated rate of emissions;
    - ii. notify the Regional Supervisor or Director immediately when corrective measures have been accomplished; and
    - iii. submit to the Regional Supervisor or Director within 15 days a written report as described in 15A NCAC 02D .0535(f)(3).

## Permit Deviations

- 3. Pursuant to 15A NCAC 02Q .0508(f)(2), the Permittee shall report deviations from permit requirements (terms and conditions) as follows:
  - a. Notify the Regional Supervisor or Director of all other deviations from permit requirements not covered under 15A NCAC 02D .0535 quarterly. A written report to the Regional Supervisor shall include the probable cause of such deviation and any corrective actions or preventative actions taken. The responsible official shall certify all deviations from permit requirements.

#### I.B Other Requirements under 15A NCAC 02D .0535

The Permittee shall comply with all other applicable requirements contained in 15A NCAC 02D .0535, including 15A NCAC 02D .0535(c) as follows:

1. Any excess emissions that do not occur during start-up and shut-down shall be considered a violation of the appropriate rule unless the owner or operator of the sources demonstrates to the Director, that the excess

- emissions are a result of a malfunction. The Director shall consider, along with any other pertinent information, the criteria contained in 15A NCAC 02D .0535(c)(1) through (7).
- 2. 15A NCAC 02D .0535(g). Excess emissions during start-up and shut-down shall be considered a violation of the appropriate rule if the owner or operator cannot demonstrate that excess emissions are unavoidable.

## J. Emergency Provisions [40 CFR 70.6(g)]

The Permittee shall be subject to the following provisions with respect to emergencies:

- 1. An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the facility, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.
- 2. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions specified in 3. below are met.
- 3. The affirmative defense of emergency shall be demonstrated through properly signed contemporaneous operating logs or other relevant evidence that include information as follows:
  - a. an emergency occurred and the Permittee can identify the cause(s) of the emergency;
  - b. the permitted facility was at the time being properly operated;
  - c. during the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the standards or other requirements in the permit; and
  - d. the Permittee submitted notice of the emergency to the DAQ within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
- 4. In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 5. This provision is in addition to any emergency or upset provision contained in any applicable requirement specified elsewhere herein.

## K. **Permit Renewal** [15A NCAC 02Q .0508(e) and 02Q .0513(b)]

This 15A NCAC 02Q .0500 permit is issued for a fixed term not to exceed five years and shall expire at the end of its term. Permit expiration terminates the facility's right to operate unless a complete 15A NCAC 02Q .0500 renewal application is submitted at least nine months before the date of permit expiration. If the Permittee or applicant has complied with 15A NCAC 02Q .0512(b)(1), this 15A NCAC 02Q .0500 permit shall not expire until the renewal permit has been issued or denied. Permit expiration under 15A NCAC 02Q .0400 terminates the facility's right to operate unless a complete 15A NCAC 02Q .0400 renewal application is submitted at least six months before the date of permit expiration for facilities subject to 15A NCAC 02Q .0400 requirements. In either of these events, all terms and conditions of these permits shall remain in effect until the renewal permits have been issued or denied.

#### L. Need to Halt or Reduce Activity Not a Defense [15A NCAC 02Q .0508(i)(4)]

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#### M. Duty to Provide Information (submittal of information) [15A NCAC 02Q .0508(i)(9)]

- 1. The Permittee shall furnish to the DAQ, in a timely manner, any reasonable information that the Director may request in **writing** to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit.
- 2. The Permittee shall furnish the DAQ copies of records required to be kept by the permit when such copies are requested by the Director. For information claimed to be confidential, the Permittee may furnish such records directly to the EPA upon request along with a claim of confidentiality.

## N. **Duty to Supplement** [15A NCAC 02Q .0507(f)]

The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the DAQ. The

Permittee shall also provide additional information as necessary to address any requirement that becomes applicable to the facility after the date a complete permit application was submitted but prior to the release of the draft permit.

#### O. **Retention of Records** [15A NCAC 02Q .0508(f) and 02Q .0508 (l)]

The Permittee shall retain records of all required monitoring data and supporting information for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring information, and copies of all reports required by the permit. These records shall be maintained in a form suitable and readily available for expeditious inspection and review. Any records required by the conditions of this permit shall be kept on site and made available to DAQ personnel for inspection upon request.

## P. Compliance Certification [15A NCAC 02Q .0508(n)]

The Permittee shall submit to the DAQ and the EPA (Air and EPCRA Enforcement Branch, EPA, Region 4, 61 Forsyth Street SW, Atlanta, GA 30303) postmarked on or before March 1 a compliance certification (for the preceding calendar year) by a responsible official with all federally-enforceable terms and conditions in the permit, including emissions limitations, standards, or work practices. It shall be the responsibility of the current owner to submit a compliance certification for the entire year regardless of who owned the facility during the year. The compliance certification shall comply with additional requirements as may be specified under Sections 114(a)(3) or 504(b) of the Federal Clean Air Act. The compliance certification shall specify:

- 1. the identification of each term or condition of the permit that is the basis of the certification;
- 2. the compliance status (with the terms and conditions of the permit for the period covered by the certification);
- 3. whether compliance was continuous or intermittent; and
- 4. the method(s) used for determining the compliance status of the source during the certification period.

## Q. Certification by Responsible Official [15A NCAC 02Q .0520]

A responsible official shall certify the truth, accuracy, and completeness of any application form, report, or compliance certification required by this permit. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

## R. Permit Shield for Applicable Requirements [15A NCAC 02Q .0512]

- 1. Compliance with the terms and conditions of this permit shall be deemed compliance with applicable requirements, where such applicable requirements are included and specifically identified in the permit as of the date of permit issuance.
- 2. A permit shield shall not alter or affect:
  - a. the power of the Commission, Secretary of the Department, or Governor under NCGS 143-215.3(a)(12), or EPA under Section 303 of the Federal Clean Air Act;
  - b. the liability of an owner or operator of a facility for any violation of applicable requirements prior to the effective date of the permit or at the time of permit issuance;
  - c. the applicable requirements under Title IV; or
  - d. the ability of the Director or the EPA under Section 114 of the Federal Clean Air Act to obtain information to determine compliance of the facility with its permit.
- 3. A permit shield does not apply to any change made at a facility that does not require a permit or permit revision made under 15A NCAC 02Q .0523.
- 4. A permit shield does not extend to minor permit modifications made under 15A NCAC 02Q .0515.

## S. <u>Termination, Modification, and Revocation of the Permit</u> [15A NCAC 02Q .0519]

The Director may terminate, modify, or revoke and reissue this permit if:

- 1. the information contained in the application or presented in support thereof is determined to be incorrect;
- 2. the conditions under which the permit or permit renewal was granted have changed;
- 3. violations of conditions contained in the permit have occurred;
- 4. the EPA requests that the permit be revoked under 40 CFR 70.7(g) or 70.8(d); or
- 5. the Director finds that termination, modification, or revocation and reissuance of the permit is necessary to carry out the purpose of NCGS Chapter 143, Article 21B.

## T. Insignificant Activities [15A NCAC 02Q .0503]

Because an emission source or activity is insignificant does not mean that the emission source or activity is exempted from any applicable requirement or that the owner or operator of the source is exempted from demonstrating compliance with any applicable requirement. The Permittee shall have available at the facility at all times and made available to an authorized representative upon request, documentation, including calculations, if necessary, to demonstrate that an emission source or activity is insignificant.

## U. **Property Rights** [15A NCAC 02Q .0508(i)(8)]

This permit does not convey any property rights in either real or personal property or any exclusive privileges.

#### V. Inspection and Entry [15A NCAC 02Q .0508(1) and NCGS 143-215.3(a)(2)]

- 1. Upon presentation of credentials and other documents as may be required by law, the Permittee shall allow the DAQ, or an authorized representative, to perform the following:
  - a. enter the Permittee's premises where the permitted facility is located or emissions-related activity is conducted, or where records are kept under the conditions of the permit;
  - b. have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
  - inspect at reasonable times and using reasonable safety practices any source, equipment (including
    monitoring and air pollution control equipment), practices, or operations regulated or required under the
    permit; and
  - d. sample or monitor substances or parameters, using reasonable safety practices, for the purpose of assuring compliance with the permit or applicable requirements at reasonable times.

Nothing in this condition shall limit the ability of the EPA to inspect or enter the premises of the Permittee under Section 114 or other provisions of the Federal Clean Air Act.

2. No person shall refuse entry or access to any authorized representative of the DAQ who requests entry for purposes of inspection, and who presents appropriate credentials, nor shall any person obstruct, hamper, or interfere with any such authorized representative while in the process of carrying out his official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

## W. Annual Fee Payment [15A NCAC 02Q .0508(i)(10)]

- 1. The Permittee shall pay all fees in accordance with 15A NCAC 02Q .0200.
- 2. Payment of fees may be by check or money order made payable to the N.C. Department of Environmental Quality. Annual permit fee payments shall refer to the permit number.
- 3. If, within 30 days after being billed, the Permittee fails to pay an annual fee, the Director may initiate action to terminate the permit under 15A NCAC 02Q .0519.

#### X. Annual Emission Inventory Requirements [15A NCAC 02Q .0207]

The Permittee shall report by **June 30 of each year** the actual emissions of each air pollutant listed in 15A NCAC 02Q .0207(a) from each emission source within the facility during the previous calendar year. The report shall be in or on such form as may be established by the Director. The accuracy of the report shall be certified by a responsible official of the facility.

## Y. Confidential Information [15A NCAC 02Q .0107 and 02Q. 0508(i)(9)]

Whenever the Permittee submits information under a claim of confidentiality pursuant to 15A NCAC 02Q .0107, the Permittee may also submit a copy of all such information and claim directly to the EPA upon request. All requests for confidentiality must be in accordance with 15A NCAC 02Q .0107.

## Z. Construction and Operation Permits [15A NCAC 02Q .0100 and .0300]

A construction and operating permit shall be obtained by the Permittee for any proposed new or modified facility or emission source which is not exempted from having a permit prior to the beginning of construction or modification, in accordance with all applicable provisions of 15A NCAC 02Q .0100 and .0300.

## AA. Standard Application Form and Required Information [15A NCAC 02Q .0505 and .0507]

The Permittee shall submit applications and required information in accordance with the provisions of 15A NCAC 02Q .0505 and .0507.

## BB. Financial Responsibility and Compliance History [15A NCAC 02Q .0507(d)(4)]

The DAQ may require an applicant to submit a statement of financial qualifications and/or a statement of substantial compliance history.

## CC. Refrigerant Requirements (Stratospheric Ozone and Climate Protection) [15A NCAC 02Q .0501(e)]

- 1. If the Permittee has appliances or refrigeration equipment, including air conditioning equipment, which use Class I or II ozone-depleting substances such as chlorofluorocarbons and hydrochlorofluorocarbons listed as refrigerants in 40 CFR Part 82 Subpart A Appendices A and B, the Permittee shall service, repair, and maintain such equipment according to the work practices, personnel certification requirements, and certified recycling and recovery equipment specified in 40 CFR Part 82 Subpart F.
- 2. The Permittee shall not knowingly vent or otherwise release any Class I or II substance into the environment during the repair, servicing, maintenance, or disposal of any such device except as provided in 40 CFR Part 82 Subpart F.
- 3. The Permittee shall comply with all reporting and recordkeeping requirements of 40 CFR 82.166. Reports shall be submitted to the EPA or its designee as required.

## DD. Prevention of Accidental Releases - Section 112(r) [15A NCAC 02Q .0508(h)]

If the Permittee is required to develop and register a Risk Management Plan with EPA pursuant to Section 112(r) of the Clean Air Act, then the Permittee is required to register this plan in accordance with 40 CFR Part 68.

# EE. <u>Prevention of Accidental Releases General Duty Clause - Section 112(r)(1)</u> – FEDERALLY-ENFORCEABLE ONLY

Although a risk management plan may not be required, if the Permittee produces, processes, handles, or stores any amount of a listed hazardous substance, the Permittee has a general duty to take such steps as are necessary to prevent the accidental release of such substance and to minimize the consequences of any release.

## FF. Title IV Allowances [15A NCAC 02Q .0508(i)(1)]

This permit does not limit the number of Title IV allowances held by the Permittee, but the Permittee may not use allowances as a defense to noncompliance with any other applicable requirement. The Permittee's emissions may not exceed any allowances that the facility lawfully holds under Title IV of the Federal Clean Air Act.

#### GG. Air Pollution Emergency Episode [15A NCAC 02D .0300]

Should the Director of the DAQ declare an Air Pollution Emergency Episode, the Permittee will be required to operate in accordance with the Permittee's previously approved Emission Reduction Plan or, in the absence of an approved plan, with the appropriate requirements specified in 15A NCAC 02D .0300.

## HH. Registration of Air Pollution Sources [15A NCAC 02D .0202]

The Director of the DAQ may require the Permittee to register a source of air pollution. If the Permittee is required to register a source of air pollution, this registration and required information will be in accordance with 15A NCAC 02D .0202(b).

## II. Ambient Air Quality Standards [15A NCAC 02D .0501(c)]

In addition to any control or manner of operation necessary to meet emission standards specified in this permit, any source of air pollution shall be operated with such control or in such manner that the source shall not cause the ambient air quality standards in 15A NCAC 02D .0400 to be exceeded at any point beyond the premises on which the source is located. When controls more stringent than named in the applicable emission standards in this permit are required to prevent violation of the ambient air quality standards or are required to create an offset, the permit shall contain a condition requiring these controls.

# JJ. General Emissions Testing and Reporting Requirements [15A NCAC 02Q .0508(i)(16)]

Emission compliance testing shall be by the procedures of Section .2600, except as may be otherwise required in Rules .0524, .0912, .1110, .1111, or .1415 of Subchapter 02D. If emissions testing is required by this permit or the DAQ or if the Permittee submits emissions testing to the DAQ to demonstrate compliance, the Permittee shall perform such testing in accordance with 15A NCAC 02D .2600 and follow the procedures outlined below:

- 1. The owner or operator of the source shall arrange for air emission testing protocols to be provided to the Director prior to air pollution testing. Testing protocols are not required to be pre-approved by the Director prior to air pollution testing. The Director shall review air emission testing protocols for pre-approval prior to testing if requested by the owner or operator at least **45 days** before conducting the test.
- 2. Any person proposing to conduct an emissions test to demonstrate compliance with an applicable standard shall notify the Director at least **15 days** before beginning the test so that the Director may at his option observe the test.
- 3. The owner or operator of the source shall arrange for controlling and measuring the production rates during the period of air testing. The owner or operator of the source shall ensure that the equipment or process being tested is operated at the production rate that best fulfills the purpose of the test. The individual conducting the emission test shall describe the procedures used to obtain accurate process data and include in the test report the average production rates determined during each testing period.
- 4. Two copies of the final air emission test report shall be submitted to the Director not later than **30 days** after sample collection unless otherwise specified in the specific conditions. The owner or operator may request an extension to submit the final test report. The Director shall approve an extension request if he finds that the extension request is a result of actions beyond the control of the owner or operator.
  - a. The Director shall make the final determination regarding any testing procedure deviation and the validity of the compliance test. The Director may:
    - i. Allow deviations from a method specified under a rule in this Section if the owner or operator of the source being tested demonstrates to the satisfaction of the Director that the specified method is inappropriate for the source being tested.
    - ii. Prescribe alternate test procedures on an individual basis when he finds that the alternative method is necessary to secure more reliable test data.
    - iii. Prescribe or approve methods on an individual basis for sources or pollutants for which no test method is specified in this Section if the methods can be demonstrated to determine compliance of permitted emission sources or pollutants.
  - b. The Director may authorize the Division of Air Quality to conduct independent tests of any source subject to a rule in this Subchapter to determine the compliance status of that source or to verify any test data submitted relating to that source. Any test conducted by the Division of Air Quality using the appropriate testing procedures described in Section 02D .2600 has precedence over all other tests.

#### KK. Reopening for Cause [15A NCAC 02Q .0517]

- 1. A permit shall be reopened and revised under the following circumstances:
  - a. additional applicable requirements become applicable to a facility with remaining permit term of three or more years;
  - b. additional requirements (including excess emission requirements) become applicable to a source covered by Title IV;
  - c. the Director or EPA finds that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
  - d. the Director or EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 2. Any permit reopening shall be completed or a revised permit issued within 18 months after the applicable requirement is promulgated. No reopening is required if the effective date of the requirement is after the expiration of the permit term unless the term of the permit was extended pursuant to 15A NCAC 02Q .0513(c).
- 3. Except for the state-enforceable only portion of the permit, the procedures set out in 15A NCAC 02Q .0507, .0521, or .0522 shall be followed to reissue the permit. If the State-enforceable only portion of the permit is reopened, the procedures in 15A NCAC 02Q .0300 shall be followed. The proceedings shall affect only those parts of the permit for which cause to reopen exists.
- 4. The Director shall notify the Permittee at least 60 days in advance of the date that the permit is to be reopened, except in cases of imminent threat to public health or safety the notification period may be less than 60 days.

5. Within 90 days, or 180 days if the EPA extends the response period, after receiving notification from the EPA that a permit needs to be terminated, modified, or revoked and reissued, the Director shall send to the EPA a proposed determination of termination, modification, or revocation and reissuance, as appropriate.

## LL. Reporting Requirements for Non-Operating Equipment [15A NCAC 02Q .0508(i)(16)]

The Permittee shall maintain a record of operation for permitted equipment noting whenever the equipment is taken from and placed into operation. When permitted equipment is not in operation, the requirements for testing, monitoring, and recordkeeping are suspended until operation resumes.

## MM. Fugitive Dust Control Requirement [15A NCAC 02D .0540]

As required by 15A NCAC 02D .0540 "Particulates from Fugitive Dust Emission Sources," the Permittee shall not cause or allow fugitive dust emissions to cause or contribute to substantive complaints or excess visible emissions beyond the property boundary. If substantive complaints or excessive fugitive dust emissions from the facility are observed beyond the property boundaries for six minutes in any one hour (using Reference Method 22 in 40 CFR, Appendix A), the owner or operator may be required to submit a fugitive dust plan as described in 02D .0540(f).

"Fugitive dust emissions" means particulate matter from process operations that does not pass through a process stack or vent and that is generated within plant property boundaries from activities such as: unloading and loading areas, process areas, stockpiles, stock pile working, plant parking lots, and plant roads (including access roads and haul roads).

## NN. Specific Permit Modifications [15A NCAC 02Q .0501 and .0523]

- 1. For modifications made pursuant to 15A NCAC 02Q .0501(c)(2), the Permittee shall file a Title V Air Quality Permit Application for the air emission source(s) and associated air pollution control device(s) on or before 12 months after commencing operation.
- 2. For modifications made pursuant to 15A NCAC 02Q .0501(d)(2), the Permittee shall not begin operation of the air emission source(s) and associated air pollution control device(s) until a Title V Air Quality Permit Application is filed and a construction and operation permit following the procedures of Section .0500 (except for Rule .0504 of this Section) is obtained.
- 3. For modifications made pursuant to 502(b)(10), in accordance with 15A NCAC 02Q .0523(a)(1)(C), the Permittee shall notify the Director and EPA (EPA Air Planning Branch, 61 Forsyth Street SW, Atlanta, GA 30303) in writing at least seven days before the change is made. The written notification shall include:
  - a. a description of the change at the facility;
  - b. the date on which the change will occur;
  - c. any change in emissions; and
  - d. any permit term or condition that is no longer applicable as a result of the change.

In addition to this notification requirement, with the next significant modification or Air Quality Permit renewal, the Permittee shall submit a page "E5" of the application forms signed by the responsible official verifying that the application for the 502(b)(10) change/modification, is true, accurate, and complete. Further note that modifications made pursuant to 502(b)(10) do not relieve the Permittee from satisfying preconstruction requirements.

## OO. Third Party Participation and EPA Review [15A NCAC 02Q .0521, .0522 and .0525(7)]

For permits modifications subject to 45-day review by the federal Environmental Protection Agency (EPA), EPA's decision to not object to the proposed permit is considered final and binding on the EPA and absent a third party petition, the failure to object is the end of EPA's decision-making process with respect to the revisions to the permit. The time period available to submit a public petition pursuant to 15A NCAC 02Q .0518 begins at the end of the 45-day EPA review period.

#### ATTACHMENT

# **List of Acronyms**

AOS Alternate Operating Scenario
BACT Best Available Control Technology

Btu British thermal unit CAA Clean Air Act

CAIR Clean Air Interstate Rule
CEM Continuous Emission Monitor
CFR Code of Federal Regulations
DAQ Division of Air Quality

DEQ Department of Environmental Quality
EMC Environmental Management Commission

**EPA** Environmental Protection Agency

FR Federal Register

**GACT** Generally Available Control Technology

**HAP** Hazardous Air Pollutant

MACT Maximum Achievable Control Technology

NAA Non-Attainment Area

NCAC North Carolina Administrative Code NCGS North Carolina General Statutes

**NESHAP** National Emission Standards for Hazardous Air Pollutants

NOx Nitrogen Oxides

NSPS New Source Performance Standard OAH Office of Administrative Hearings

**PM** Particulate Matter

PM<sub>10</sub> Particulate Matter with Nominal Aerodynamic Diameter of 10 Micrometers or Less

**POS** Primary Operating Scenario

PSD Prevention of Significant DeteriorationRACT Reasonably Available Control Technology

SIC Standard Industrial Classification

**SIP** State Implementation Plan

SO<sub>2</sub> Sulfur Dioxide tpy Tons Per Year

**VOC** Volatile Organic Compound